

BIFAO 26 (1926), p. 129-193

CRESWELL (Keppel A. C.)

The works of Sultan Bibars al-BunduqdÃ¢rÃ® in Egypt [avec 31 planches].

THE WORKS
OF SULTAN BIBARS AL-BUNDUQDÂRÎ
IN EGYPT

BY

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HISTORICAL INTRODUCTION.

After the death of Sheger ad-Durr, a son of her husband Aybek by his divorced wife was put on the throne, but, as he was only a boy of 15, he was deposed in November 1259 by the Regent Quṭuz, who himself ascended the throne, remarking that this was no time for a boy puppet, a fighting king being what was wanted. And he was right, for the greatest possible peril now threatened Egypt, — the advance of the Mongols under Hûlâgû Khân, who had taken Baghdâd in February of the previous year, had murdered the Khalif, and was now threatening Syria. A peremptory summons to submit having being received, Quṭuz put to death the Mongol envoys, hung up their heads over the Bâb Zuweyla, and marched up the coast of Palestine with the Egyptian army. The vanguard under Bibars drove the Mongols out of Gaza, and then turning inland met their main army near Beisân. A battle known by the name of a ʿAyn Jalût (Goliath's Spring) took place 25 Ramaḍân 658 (3rd September 1260), and ended in a victory for the Mamlûks. Ketbughâ, the Mongol General, was killed, the population of Damascus rose and turned out the Mongol garrison, and the whole of Syria was rapidly recovered [1]. Bibars, who had greatly distinguished himself in this campaign, had been led by Quṭuz to

[1] Maqrîzî, in Quatremère, *Sultans Mamlouks,* I A, pp. 86 and 101-109; Howorth, *History of the Mongols,* III, pp. 165-170; Muir, *Mameluke Dynasty,* pp. 10-11; and Lane-Poole, *History,* pp. 261-262.

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expect the Governorship of Aleppo, but the latter, having become suspicious of Bibars' ambition, gave it to another. Bibars, fearing worse was in store for him, formed a conspiracy, as a result of which Quṭuz was murdered under circumstances of disgusting treachery, and Bibars was forthwith elected Sultan in his place, in Dhû l-qaʿda 658 (October 1260)[1].

Bibars was a tall man with blue eyes. He had been born in Kipchak in 1223, and was purchased by Sultan Ṣâliḥ Ayyûb in Damascus in 644 (1246). He was the first great Mamlûk Sultan, a man of extraordinary activity, a good organizer and administrator, a first-class general and one of the most formidable opponents the Crusaders ever had, and also, as we shall see, a great builder. The salient features of his reign are (1) the revival of the Abbâsid Khalifate, (2) his far reaching alliances with Bereke, Khân of the Golden Horde on the Volga; Michael Palæologus, the Byzantine Emperor; Manfred, King of Sicily; James of Aragon, and Charles of Anjou, against the Mongol danger which was still formidable and threatening, (3) his campaign against the Crusaders, which left them very little territory in Palestine, and (4) his great building activity. The latter falls into two divisions, (*a*) his work in Egypt, which was mainly confined to ecclesiastical buildings, and (*b*) his work in Palestine and Syria, which chiefly consisted in repairing fortresses recovered by him from the Mongols or the Crusaders[2]. The former we will now study in detail but the latter does not come within the scope of this memoir. Four monuments due to him have survived to the present day in Egypt, viz :

(1) The Madrasat aẓ-Ẓâhirîya.
(2) The Bridge of Abû l-Munagga.
(3) The Mosque of aẓ-Ẓâhir.
(4) The miḥrâb in the N.-W. wall of the mosque of ʿAmr.

[1] MAQRÎZÎ, in QUATREMÈRE, *op. cit.*, I A, pp. 110-113; AS-SUYÛṬÎ, JARRETT'S transl., pp. 501-502; MUIR, *op. cit.*, p. 11.

[2] For the life of Bibars see *Recueil des historiens des Croisades. A — Historiens orientaux*, vol. I, Abûlfida, pp. 129, 139, 143 ff.; MAQRÎZÎ, in QUATREMÈRE, *Sultans Mamlouks*, I A, pp. 116 to end, and I B, pp. 1-155; IBN SHÂKIR, *Fawât al-Wafayât*, pp. 85-91; MUJÎR AD-DÎN, pp. 432-434; SAUVAIRE's transl., pp. 237-240; WEIL, *Geschichte der Chalifen*, IV, pp. 20-103; MUIR, *Mameluke Dynasty*, pp. 13-42; LANE-POOLE, *History*, pp. 235, 246, 248-251 and 262-275; SOBERNHEIM's art. *Baibars*, in the *Encycl. of Islam*, I, pp. 588-589; and STEPHENSON, *Crusaders in the East*, pp. 334-346.

I. — THE MADRASA OF SULTAN BIBARS I[1].

History and date. — Maqrîzî says that the Ẓâhirîya madrasa occupied the site of the Hall of Tents and the Hall of the Lotus of the Great Fâṭimide Palace. Sultan Bibars had scarcely, by an act of arbitrary jurisdiction, put the Treasury in possession of the Palace and other residences still belonging by right to the descendants of the Fâṭimides, when the Qâḍî Kamâl-ad-Dîn Ṭâhir ibn al-Faqîh Naṣr, Chancellor of the Exchequer, proceeded with the valuation of the group of buildings which contained the Golden Gate and these two halls. The Hanbalite Sheykh of the Madrasa Ṣâliḥîya, Shams ad-Dîn Muḥammad al-Muqaddasî, immediately bought the Hall of Tents; he re-sold it to the Sultan, who without delay had it demolished and gave orders that no forced labour was to be employed on the new building. On 2 Rabîʿ I 660 (25th February 1262) the first stone was placed in position; on the 4th Kamâl ad-Dîn sold to Shams ad-Dîn for the sum of 1095 dinars, the Hall of the Lotus, situated to the west of the preceding and next, in all probability to the mausoleum of Ṣâliḥ; on the 11th the Hall of the Lotus, bought by Bibars, met the fate of the Hall of Tents. Completed at the beginning of the year 662, the new college was inaugurated 5 Ṣafar of the same year (9th December 1263)[2].

[1] Bibliography: c. 1412, Qalqashandî, Wüstenfeld's transl., pp. 69, 81 and 137; — 1427, Maqrîzî, *Khiṭaṭ*, I, p. 404, l. 18; II, pp. 303, l. 22, and 378-379; and his *Sulûk* in Quatremère, *Sultans Mamlouks,* I A, pp. 224-225, 228-230, and I B, p. 39; — 1497, as-Suyûṭî, *Ḥusn al-muḥâḍara,* II, pp. 189 and 193, l. 4; *History of the Caliphs,* Jarrett's transl., p. 506; — 1522, Ibn Iyâs, *Ta'rîkh*, I, p. III, l. 25; — 1799, Cassas, *Voyage pittoresque de la Syrie,* III, pl. 63 (to right); — 1801, Sharqâwi, on margin of Isḥâqi, p. 122; — 1812, *Description de l'Égypte, état moderne,* t. XVIII, 2e partie, p. 311; — 1849, Roberts (David), *Egypt and Nubia,* III, 18th plate (to left); — 1870, Mehren, *Câhirah og Kerâfat,* II, pp. 6-7; — 1873, Bourgoin, *Les Arts arabes,* pl. 74 (door); *C. R.,* 1882-1885, p. 35; — 1887, Ravaisse, *Essai, M. M. A. F. C.,* I, pp. 429-430, 450-451, and 452-453; — 1888, ʿAly Pasha Mubârak, *Khiṭaṭ al-Gedîda,* V, p. 43, ll. 23-24; — 1896, van Berchem, *C. I. A.,* I, pp. 118-120; — 1907, Margoliouth, *Cairo, Jerusalem and Damascus,* pp. 70-71; — 1910, Rhoné, *L'Égypte* (2e édit.), pp. 273, 275-276, and illustration on p. 279 (to right); — 1917, Devonshire (Mrs. R. L.), *Rambles in Cairo,* pp. 39-40, with illustr.; — 1919, Creswell, *Brief Chronology, B.I.F.A.O.,* XVI, p. 78; — 1922, Creswell, *Origin of the Cruciform Plan of Cairene Madrasas, ibid.,* XXI, pp. 36-40; — 1924, Briggs, *Muhammadan Architecture,* p. 97 and fig. 57.

[2] Ravaisse, *Essai, M.M.A.F.C.,* I, p. 452, quoting Maqrîzî, *Khiṭaṭ,* II, pp. 378-379;

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It therefore took 20 1/2 months to build. Four distinct classes were held in its four lîwâns.

The dating inscription, which once ran across the entrance bay was copied by Mehren, and published from his manuscript by van Berchem. It contained the date 660, the year of foundation[1]. A fragment of it still exists on the remaining door jamb.

Present condition. — Although this great madrasa was in ruins even when Maqrîzî wrote[2] the greater part of it appears to have existed until 1874, when a road was cut right through it from the Meydân Beyt al-Qâḍî to the Sûq an-Naḥḥâsîn, opposite the Mausoleum of Sultan Qalâûn[3]. It suffered a further injury in 1882 when the minaret fell[4].

To-day little more remains than a block about 5 × 11 metres, which formed the lower part of the west corner (Plate I), and the sides of the south-western lîwân with the springing of the vault.

The block referred to consists of the right-hand door jamb A (Fig. 1) with a part of the dating inscription, and a small room B which occupies the angle, and which was possibly a sebîl[5]. It must once have had two windows, one opening on the north-western, the other (C) on the south-western façade. The decorated relieving arch above the joggled lintel of the former may be seen in Plate I, the lower part is occupied by the stall of a copper-smith. The other window likewise has a joggled lintel and relieving arch decorated with well-preserved ornament of great beauty (Plate II). In the tympanum are two feline animals affronted, which are probably panthers. This question will be discussed in the section on the Bridge of Abû l-Munagga. The south-western façade continues for 11 m. 32 to a point in a line with the façade of Sultan Ṣâliḥ's mausoleum. There is a second window (D) in this façade, which unfor-

Quatremère, *op. cit.*, I A, pp. 228-229, and van Berchem, *C. I. A.*, I, pp. 218-219.

[1] *C. I. A.*, I, pp. 118-119.

[2] *Khiṭaṭ*, II, p. 379.

[3] Ravaisse, *Essai, loc. cit.*, pp. 450-451 and 453.

[4] *C. R.*, 1882-1883, p. 35. It is however erroneously referred to as the minaret of Sultan Ṣâliḥ Ayyûb, presumably because it was so close to his mausoleum.

[5] Maqrîzî (*Khiṭaṭ*, II, p. 379), Quatremère (*Sultans Mamlouks*, I A, p. 229), and Margoliouth (*Cairo, Jerusalem and Damascus*, p. 71) say that a *sebîl-kuttâb* was attached to the mosque, and a corner on the street is almost invariably chosen for this purpose.

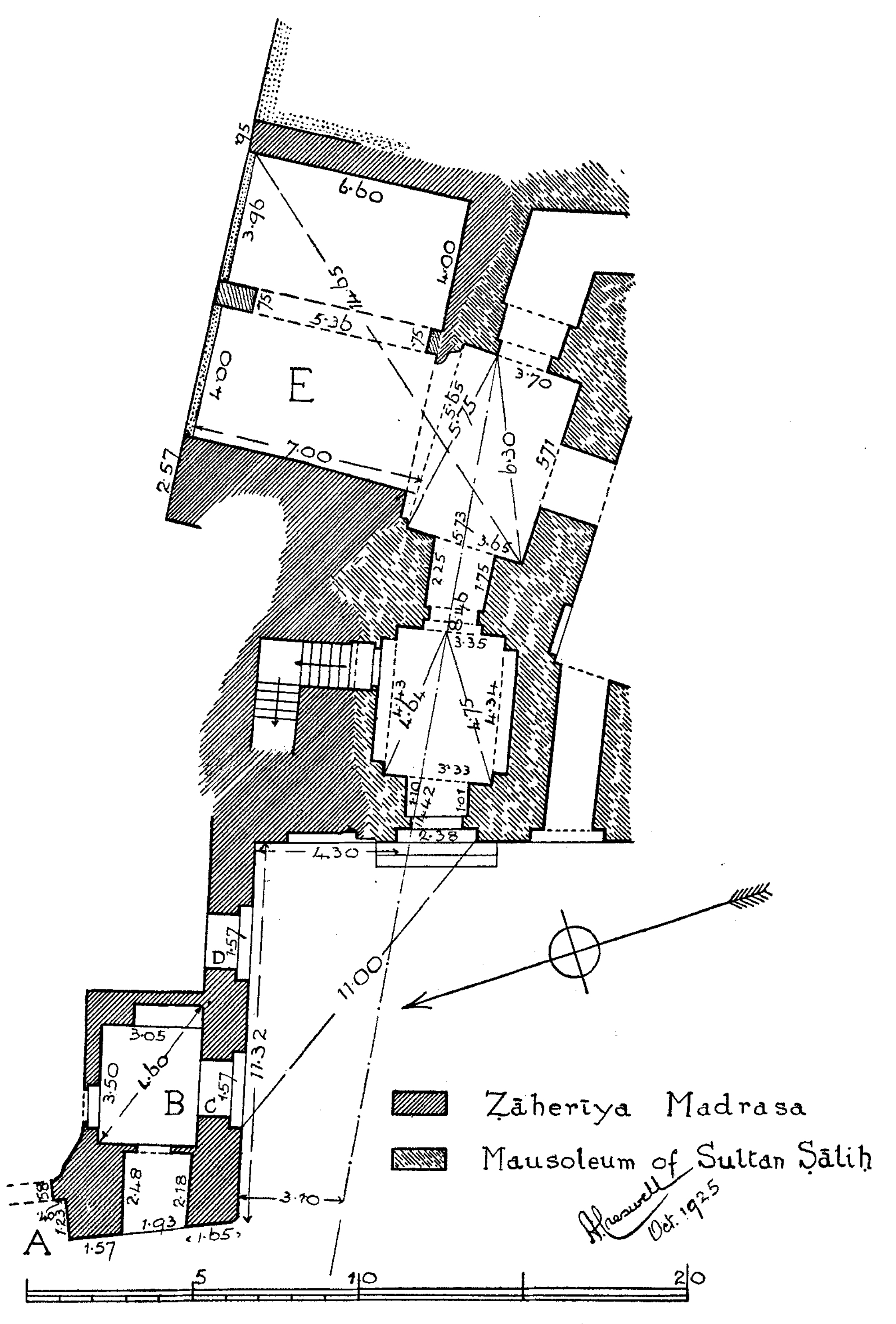


Fig. 1. — Ẓâhirîya Madrasa : plan. — Scale 1:200.

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tunately is not so well preserved, only a few of the voussoirs of the relieving arch being in place (Plate III). The space behind it is occupied by the shed of a charcoal dealer. The lower part of the south-western façade is entirely concealed by the stalls of copper-smiths which have been built in front of it (Plate I), and the charcoal dealer uses the roofs of these stalls as a store place for his sacks of charcoal, which are frequently to be seen piled up against the beautiful ornament over the windows [1]. It is only possible to photograph this ornament when his stock is low. The top of this block is paved with small flagstones, probably belonging to the lower floor of the house which must have been built above in the first half of the XIX^th^ century, and which may be seen in Chardin's sketch (Fig. 2).

At a distance of about 11 m. 50 from the re-entrant angle is the side of a great mutilated lîwân E, 8 m. 70 in span and about 7 m. 20 in depth. Its sides were of stone, but a great part of the masonry has been renewed at a late date, and a shallow miḥrâb inserted on the south-east side at the same time. The springing of the brick vault may still be seen. The back of this lîwân touches the side of the vaulted room which forms a vestibule in front of the inner entrance of Sultan Ṣâliḥ's mausoleum. A pair of arches have been built across its outer end, and the arches subsequently walled up to their springing with masonry of the meanest type (Plate I).

Behind the houses on the opposite side of the street is a great arch [2], which one might fancy, at first sight, to be part of the opposite lîwân. This it cannot be for two reasons, firstly because it is not on the same axis as the other, but considerably farther to the north-west, and secondly because it is only about 7 m. 20 in span instead of 8 m. 70, and I know of no instance of a pair of unequal and asymmetrically placed side lîwâns. Moreover this great arch on further examination, proves to be an arch only and not the end of a brick vault such as that of the Ẓâhirîya, as both sides are properly faced, and it must therefore have been the frontal arch of a wooden-roofed lîwân, belonging to some building which has disappeared.

[1] I am glad to say that these stalls have been removed during the printing of this memoir.

[2] It may be reached either from the shop which occupies No. 11 Sharia Beyt al-Qâḍî, or from the partly ruined okâla opposite the Madrasa of Sultan Barqûq.

Reconstruction. — The great size of this madrasa can be estimated from the fact that its miḥrâb was about 55 metres from the Sûq an-Naḥḥâsîn [1]. The miḥrâb of the Ṣâliḥîyya is 54 m. 45 [2] (plus the varying thickness of the façade) from the same street; the two madrasas were therefore practically the same in depth. A beautiful painting by David Roberts (Plate IV A) made in 1839 [3], and another (Plate V) by an unknown artist, have preserved for us the important fact that this madrasa had a stalactite portal, the earliest in Egypt and thirty-five years earlier than the earliest existing example, that of the Madrasa-Mausoleum of Zeyn ad-Dîn Yûsuf, built 697 (1298). These two views have been taken looking south down the Sûq an-Naḥḥâsîn from in front of the northernmost window of Qalâûn's mausoleum. On the left we have the portal of the Ẓâhirîya with its stalactite head, a narrow strip, say half a metre wide, of Sultan Ṣâliḥ's mausoleum (the dome is of course hidden by the portal of the Ẓâhirîya), then the Sebîl-kuttâb of Khusrau Pasha, and on the right the Madrasa of Qalâûn with the little Sebîl of an-Nâṣir Muḥammad at the corner. The façade of the madrasa is completely buried in a house, since cleared away, and its crenellations only can be seen peeping above the roof. Plate IV B is a photograph taken from the same stand-point as the painting. Although I have already pointed out errors in the work of Roberts [4], those details in this painting which it is possible to check to-day are so accurate that I feel justified in accepting these two pictures as reliable evidence that the Ẓâhirîya madrasa had a stalactite portal.

Another view of the same street taken in the opposite direction (Fig. 3) was made by Cassas and published in 1799 [5]. On our left we have the façade of Qâlâûn's mausoleum, followed by that of an-Nâṣir Muḥammad's madrasa and that of Barqûq, and on our right is part of the south-western façade of the Ẓâhirîya. It is a far less accurate piece of work than that of Roberts and, although we can see from the existing remains of the Ẓâhirîya that the façade

[1] Ravaisse, *Essai, loc. cit.*, I, pp. 430 and 453.

[2] Depth of *lîwân qibli*, 14 m. 85, *ṣaḥn*, 27 m. 90; north-east lîwân, 11 m. 70; total 54 m. 45.

[3] *Egypt and Nubia*, vol. III, 18th plate, to left.

[4] *The Origin of the Plan of the Dome of the Rock. British School of Archæology at Jerusalem. Supplementary Papers, No.* 2, p. 16.

[5] *Voyage pittoresque de la Syrie, de la Phénicie, de la Palestine, et de la Basse-Égypte*, vol. III, pl. 63 (to right). Also reproduced in Herz, *Baugruppe des Sultans Qalâûn*, Abb. 27, and in Much, *Islamik*, Abb. 16.

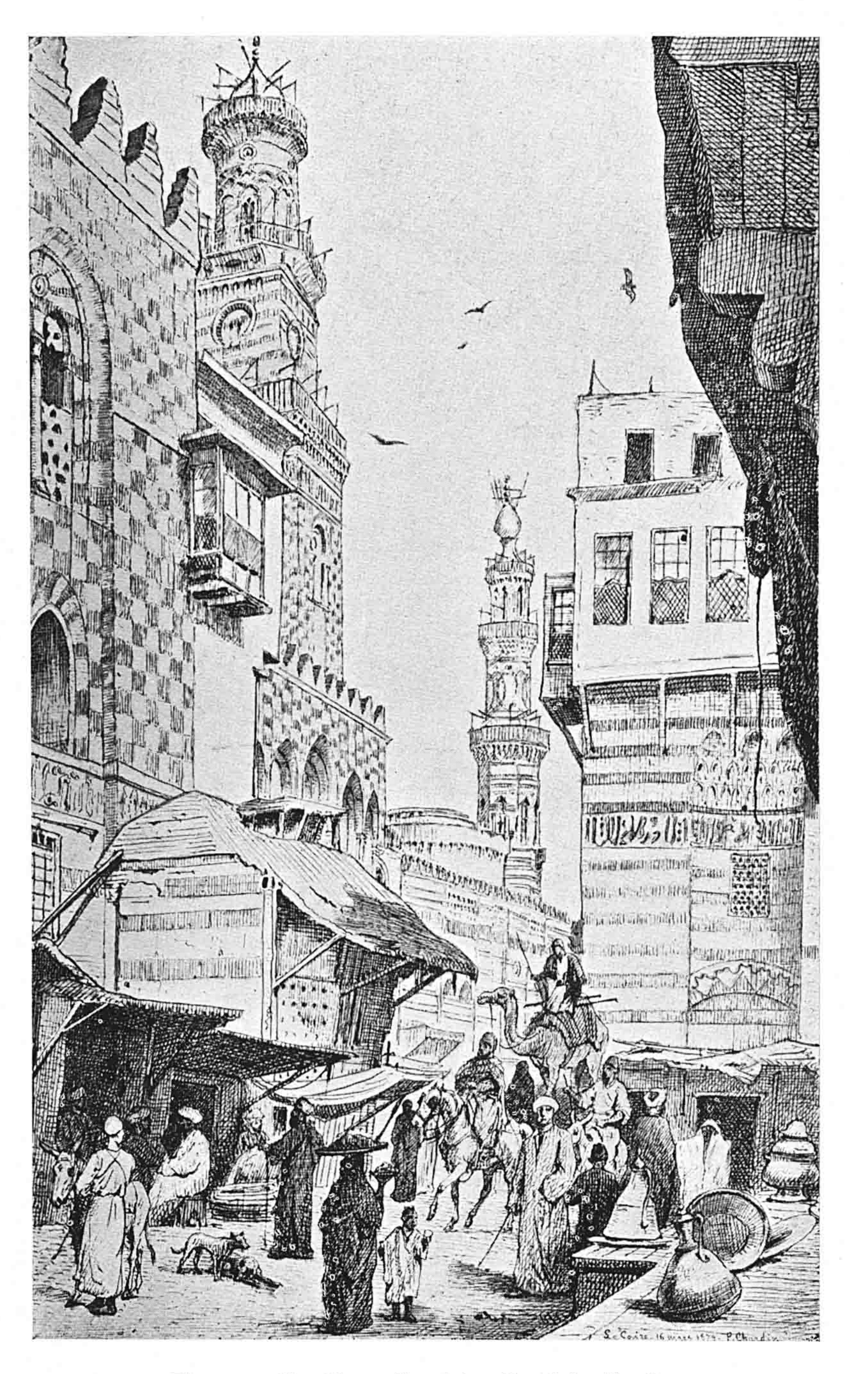


Fig. 2. — The Sûq an-Naḥḥâsîn : Sketch by Chardin.
[From Rhoné, *L'Égypte à petites journées.*]

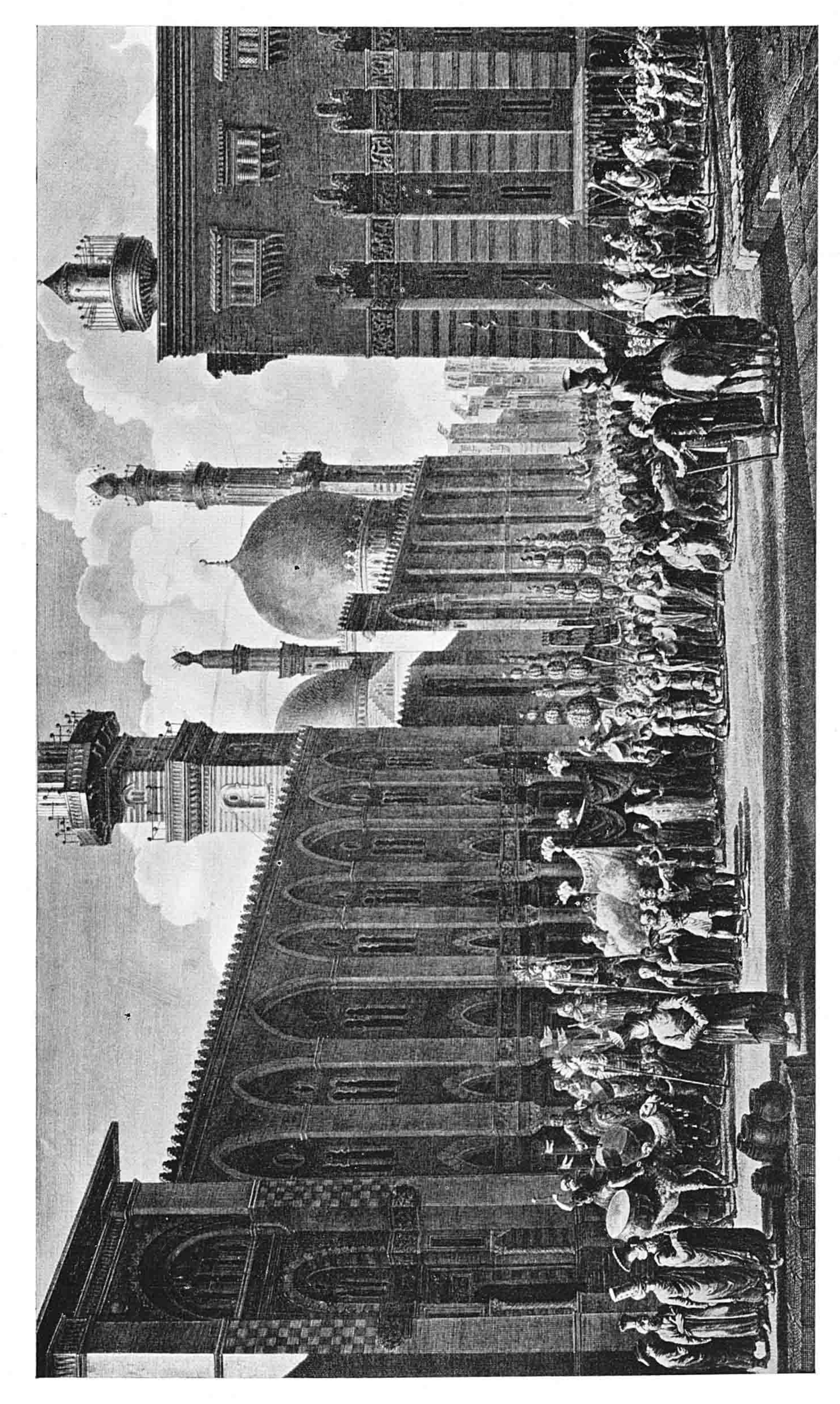


Fig. 3. — THE SÛQ AN-NAḤḤÂSÎN AT THE END OF THE XVIIIth CENTURY. [From CASSAS, *Voyage pittoresque de la Syrie.*]

consisted of vertical recesses (0 m. 35 deep) containing the windows, there is not space for the four panels shown by Cassas. The flank shown, as stated above, makes a salient of 11 m. 32 with the façade of Sultan Ṣâliḥ's mausoleum, and the edge of window D is 9 m. 42 from the outer corner, leaving 1 m. 90 only, after which the side of the madrasa can no longer have been visible, except perhaps the upper part on account of its great height. The band of inscription which runs along at the top of the panels must however be a correct detail, since part of the same band is visible in Roberts' painting just below the stalactite head of the portal; likewise the mashrabîya balconies on brackets, as here again the two views confirm each other. The minaret is a poorer affair than one would have imagined considering the damage done by its fall. The stump shown by Cassas cannot be the original one, the sudden and enormous overhang of its gallery is incredible, and I am inclined to conclude that it is a sketch made afterwards from rough notes. Work of such purely fanciful kind was, one might almost say, the rule a century ago, and Cassas may be convicted of it in this very drawing by comparing his version of Barqûq's minaret with a photograph [1].

This view is confirmed by a drawing by P. Chardin made in 1865 [2], from nearly the same view-point as that of Cassas (Fig. 2). It is a really accurate sketch, judging from all the details which can be checked to-day, e. g. the minarets of Qalâûn and Barqûq, the first window in the Ẓâhirîya and the width of its recessed panel. The corner of the Ẓâhirîya is the same as that shown by Cassas, but the mashrabîya balconies have been replaced by hideous glass window frames, and an extra storey appears to have been added. The recessed panel terminates, as might be expected, in a square stalactite head. But there is no minaret, although we know that it did not fall until seventeen years later. Rhoné, however, who published Chardin's drawing, expressly mentions the «minaret à coupole qui s'élève en arrière de l'angle saillant que l'on voit sur la droite de notre dessin». This is another object lesson which shows the extreme care which must be taken when using old drawings as

[1] Other errors are : (*a*) Barqûq's façade — five recessed panels instead of four; (*b*) Madrasa of an-Nâṣir Muḥammad — drum below dome should be octagonal, instead of square with corners chamfered off.

[2] Reproduced by Rhoné in *L'Égypte à petites journées* (2e éd.), p. 279; and in the *Gazette des Beaux-Arts*, 2e période, t. XXIV, p. 425.

evidence[1]. We may, however, conclude from these two views that the façades of the Ẓâhirîya were roughly equal in height to that of Sultan Qalâûn, and that its flank was occupied by four storeys of students' cells.

A beautiful brass-plated door, which now decorates the east façade of the French Legation at Cairo, has been recognized by van Berchem as formerly belonging to the Ẓâhirîya madrasa. The Legation was originally built by the Comte de Saint-Maurice in 1874, shortly after the demolition of the greater part of the madrasa. The door is dated 661, but the date is expressed in figures, which immediately aroused van Berchem's suspicion, as, with the exception of the Mausoleum of the Emîr Sunqur Saʿdy (715 H. = 1315), no monument, having an inscription with the date expressed in figures, is known before the Ottoman Conquest[2]. A fresh examination of the door showed that the last three words plus the date had been cut at a later date, probably quite recent. At the same time it was evident, from the use of the genitive instead of the nominative at the beginning of the sentence, that the first part (probably three words) had been cut off, and the whole band moved to the right to make room for the addition at the end. He therefore came to the conclusion that some dealer, knowing that this door came from the Madrasa of Bibars, added to the inscription in order to augment the value by a certain date[3].

In addition to this the Victoria and Albert Museum possesses some plaques consisting of a central boss, bearing the panther of Bibars, surrounded by twelve symmetrically shaped pieces arranged around it; a similar boss surrounded by nine similar plaques; a knocker; a border of pierced arabesque, and a piece of an Arabic inscription also pierced[4]. Lane-Poole points out that all these pieces have been cast, not cut, and therefore are true to pattern. All these pieces were acquired from M. de Saint-Maurice in 1884 and there can be no doubt that they once belonged to the doors of this madrasa, and not to Bibars' mosque for the reason given in the next paragraph.

[1] On this question see my *Origin of the Plan of the Dome of the Rock*, pp. 15-16.

[2] See my *Brief Chronology*, *B. I. F. A. O.*, XVI, pp. 92-93 and Pl. XV c.

[3] *C. I. A.*, I, p. 120.

[4] See Lane-Poole, *Art of the Saracens in Egypt*, pp. 186-187, and Figs. 83-86; and Briggs, *Muhammadan Architecture*, p. 223 and Fig. 232.

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Bourgoin[1] has published a beautiful drawing of a brass door under the title : «*Porte de la Mosquée Sultan Daahir Bibars au Caire*». He cannot refer to the mosque in the Meydân aẓ-Ẓâhir, as that had been pillaged and misused for a century before his time (see p. 155 below), and it is incredible that such a magnificent piece of brass work could have been left there. I therefore conclude that he is referring to the building we have just described. Nevertheless the door illustrated by him is not that in the French Legation, but may well be another door, now lost, which served a different part of the same Madrasa.

The Stalactite Portal. — That this feature is not a creation of the Egyptian school is proved by the fact that Syria can show a series of examples commencing nearly a century before the earliest known example in Cairo. The following are all the examples known to me before the end of Bibars' reign.

(1) The earliest is the entrance bay of the Madrasat al-Bakhtîya at Aleppo (Plate VI A), which was built in 589 (1193)[2].

(2) The next example is provided by the Mashhad of Ḥuseyn at Aleppo, dated 608 (1211-1212) by an inscription over the entrance bay[3]. The crispness and beauty of the work is remarkable; it has a style and individuality of its own and is, in many respects, unique.

(3) Our next example, the entrance bay of the Madrasat aẓ-Ẓâhirîya at Firdaus, just outside Aleppo, shows considerable advance in scale (Plate VI B). This Madrasa was built by Malik aẓ-Ẓâhir Ghâzi in 616 (1219-1220)[4].

(4) At Aleppo, in the suburb of Firdaus and quite near the Ẓâhirîya, is a madrasa known as the Kâmilîya. It is not dated and I have not been able to identify it with any of those mentioned in the MS. *Description of Aleppo* translated by Blochet, but there can be little doubt, on account of its massive style and its resemblance to the Ẓâhirîya, that it was built in the first half of the XIIIth century A. D. The treatment of the entrance bay is an almost exact copy of that of the latter, and I therefore place it next to it.

[1] *Les Arts arabes*, Pl. 74.

[2] See my Madrasa memoir, *loc. cit.*, XXI, pp. 5-6.

[3] Bischoff, *Tuḥaf al-anbâ'*, p. 151; and van Berchem, *Inschr. aus Syrien, loc. cit.*, pp. 48-49.

[4] According to the *Description of Aleppo*, MS. Ar. 1683 in the Bibliothèque Nationale; translated by Blochet, as an Appendix to his transl. of Kamâl ad-Dîn, in the *Revue de l'Orient latin*, t. VI, pp. 28-29.

(5) The Jâmiʿ and Madrasat al-Firdaus, just outside Aleppo has a stalactite entrance bay in its eastern side. This madrasa is dated 633 (1235-1236)[1].

(6) Our next example is the Ribâṭ Khânqan at Aleppo. It was built in 635 (1237-1238) according to an inscription over the door-way[2].

(7) I close this series with the entrance bay of the Ẓâhirîya madrasa at Damascus, which was commenced by Bibars in 676 (1277) but only finished after his death in 679 (1280)[3].

Let us now carry our investigation further[4]. It will be observed from this series that the stalactite portal is a feature which appears to have come down through Syria from the north. For example, at Aleppo it first appears in the Madrasa of Shad Bakht, built 589 (1193), but is not found in two slightly earlier buildings, although they have fine entrances. At Maʿarrat an-Nuʿmân (c. 50 miles south of Aleppo) it is not employed, either in the Shâfeyite madrasa, dated 595 (1199), or in the Jâmiʿ Nebi Allah Yûsha (Joshua), dated 604 (1207-1208)[5]. At Damascus it first appears in the first half of the XIIIth century[6], and is found fully developed in the second half.

[1] See my Madrasa memoir, *loc. cit.*, p. 7.

[2] Bischoff, *op. cit.*, p. 142.

[3] See my Madrasa memoir, *loc. cit.*, pp. 49-50.

[4] In this discussion I have excluded the portal of the Maristân of Nûr ad-Dîn at Damascus, as it is a type quite distinct from the stalactite portals of cut stone, discussed or catalogued here. Its stalactites belong rather to the Mesopotamian cycle, which commences with Najmi, Imâm Dûr, and the Mausoleum of Zubayda at Baghdâd, etc., crosses Syria (dome of the Mausoleum of Nûr ad-Dîn at Damascus, and of the vestibule of his Maristân; also the portal of the latter), and passes westwards to Palermo (main hall of the Zîza Palace) and Spain.

[5] Van Berchem and Fatio, *Voyage en Syrie*, I, p. 202.

[6] It will be seen from the attached list that the first example in Damascus is dated 632 (1234/5). I have intentionally excluded the so-called «Tabutluk Turbeh», which Wulzinger and Watzinger (*Damaskus : die islamische Stadt*, pp. 120-123, Abb. 35, Taf. 12 *c* and *d*, and 13 *a* and *b*) suggest was built c. 620 (1223), for the following reasons. This remarkable monument is decorated with exquisite stucco ornament, unique of its kind in Syria. Two features, however, provide a basis for chronological argument, (*a*) the bands of inscriptions in round-ended panels with circular medallions between (Wulzinger and Watzinger, Taf. 12 *c*), and (*b*) the Spanish element (treatment of the arches). The former feature is unknown elsewhere in Syria, but it is fairly common in Egypt, where it first appears in 684 (see my *Brief Chronology, loc. cit.*, pp. 82 and 83-84). — N. B. The illustration in Saladin, *Manuel*, p. 106, quoted by Wulzinger and Watzinger, is *not* the miḥrâb of Shagar ad-Durr, as stated by Saladin, but the miḥrâb of the mosque of al-ʿAmrî

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At Jerusalem it is not employed in any building until 711 (1311), the date of the first example, the Mausoleum of Saʿd ad-Dîn Jashankîr ar-Rûmi[1]. At Hebron it was not employed by Qalâûn when he built his Ribâṭ in 679 (1280-1281)[2], but it is found in the Mosque of Sheykh ʿAlî Bakka, the portal of which was built in 702 (1303-1304)[3].

In Egypt it failed to obtain an immediate hold; Sultan Qalâûn never employed it either in Cairo, Jerusalem or Hebron, and the following tabulated statement[4], which summarises the evidence for Syria and Egypt, shows that it did not become general in Cairo until after the commencement of the XIVth century.

	NOT USED IN THE YEAR.	USED IN THE YEAR.
ALEPPO :		
Jâmiʿ ash-Shaibîya	545 (1150)	
Madrasa Khân aṭ-Ṭutun	564 (1168-1169)	
Maristân of Nûr ad-Dîn	549-569 (1154-1174)	
Madrasa of Shad Bakht		589 (1193)
MAʿARRAT AN-NUʿMÂN :		
Shâfeyite Madrasa	595 (1199)	
Jâmiʿ Nebi Allah Yûsha (Joshua)	604 (1207-1208)	

at Qûṣ! — The second feature, the Spanish element, is never found in Egypt, or elsewhere in Syria, nevertheless elements of West-Islamic origin (e. g. the round horse-shoe arches in the Qalâûn complex, 1284-1285, in the minaret of Ibn Ṭûlûn's Mosque, due to Lagîn in 1296, in the minaret of the Mosque of Salâr and Sangar al-Gawlî, 1303, etc.) make their appearance in Egypt after 1284. This West-Islamic influence is, I believe, to be explained in both cases, by the progress of the Christian arms between 1236 and 1260, in which period Ferdinand III of Castile and Jayme of Aragon conquered Cordova, Valencia, Seville and Murcia, events which are known to have been accompanied by the exodus of a great part of the Muslim population. The artistic effect of this exodus first makes itself felt in Egypt in 1284; Syria is unlikely to have felt it sooner, and the second feature mentioned above tends to confirm my conclusion that the «Tabutluk Turbeh» should be placed c. 1280-1300.

[1] MUJÎR AD-DÎN, p. 395 at bottom; SAUVAIRE's transl., p. 160; and VAN BERCHEM, *C. I. A., Jérusalem*, I, p. 280.

[2] MUJÎR AD-DÎN, p. 426; SAUVAIRE's transl., p. 223.

[3] *Ibid.*, p. 292.

[4] In this table I have confined myself to monuments with ambitious entrances, and omitted several which have entrances lacking monumental treatment.

	NOT USED IN THE YEAR.	USED IN THE YEAR.
DAMASCUS :		
Madrasat al-ʿÂdilîya	620 (1222-1223)	
Jâmiʿ at-Tauba		632 (1234-1235)
Maristân of Qaymârî, at Ṣâliḥîya		646 (1248-1249)
Madrasat az-Ẓâhirîya		679 (1280)
JERUSALEM [1] :		
Khânqâ of Saladin (Plate XXVII A)	585 (1189)	
Tank (*sâqiya*) of Malik ʿÂdil Abû Bakr	589 (1193)	
Ribâṭ of the Emîr Aidughdi Ruknî	666 (1267-1268)	
Ribâṭ of Qalâûn	681 (1282-1283)	
Mausoleum of the Emîr Saʿd ad-Dîn al-Jashankîr ar-Rûmi		711 (1311)
Madrasa of the Emîr Tankiz		729 (1328-1329)
HEBRON :		
Ribâṭ al-Manṣûrî	679 (1280-1281)	
Mosque of Sheykh ʿAlî Bakka		702 (1303)
EGYPT (Cairo) [2] :		
Madrasa of Sultan Bibars		660-662 (1262-1263)
Mosque of Sultan Bibars	665-668 (1266-1270)	
Mausoleum of Muṣṭafa Pasha (so-called)	666-672 (1267-1272)	
Mausoleum of Faṭma Khâtûn	682-683 (1283-1284)	
Maristân-Mausoleum-Madrasa of Qalâûn	683-684 (1284-1285)	
Mosque of al-Baqlî	end of XIII^th century	
Madrasa-Mausoleum of Zeyn ad-Dîn Yûsuf		697 (1298)
Madrasa of an-Nâṣir Muḥammad	695-703 (1295-1303)	
Madrasa of Salâr and Sangar al-Gawlî		703 (1303-1304)
Khânqâ and Mausoleum of Bibars II		706-709 (1306-1309)
Mausoleum of the Emîr Sunqur Saʿdî		715 (1315)
Mosque of an-Nâṣir Muḥammad	718-735 (1318-1335) [3]	718-735 (1318-1335) [4]
Mosque of the Emîr Ḥuseyn	719 (1319)	
Mosque of the Emîr Âlmalik		719 (1319)
Mosque of Aḥmad al-Mihmandâr		725 (1324-1325)
Mosque of the Emîr Almâs		730 (1329-1330)
Mosque of the Emîr Qûṣûn		730 (1329-1330)
Khân of the Emîr Qûṣûn	720-742 (1320-1341)	
Mosque of the Emîr Beshtâk		736 (1336)
Palace of the Emîr Yushbak		c. 738 (1337)
Mosque of Alṭunbughâ al-Mâridânî		739-740 (1339-1340)

[1] For dates, see VAN BERCHEM, *C. I. A.*, II, *Jérusalem*.
[2] For these dates, see my *Brief Chronology*, in the *B. I. F. A. O.*, t. XVI.
[3] N.-E. and S.-W. entrances.
[4] N.-W. entrance.

Although the origin of this beautiful type of monumental entrance cannot be demonstrated, since the embryonic stages in its evolution appear to have perished, yet it is perhaps permissible to make a suggestion, viz. that it was derived from portals such as that of the Beyt al-Khalifa at Sâmarrâ, where a deep entrance bay is covered by a semi-dome on a pair of squinches[1]. Given this scheme, it is obvious that, on its importation at a later date into Syria and subsequently into Egypt, the squinches would be replaced by the device there in use for supporting domes. That this has actually happened may be realised by comparing our earliest example, the entrance bay of the Madrasa of Shad Bakht, 589 (1193), with the pendentives of the dome over the miḥrâb of the nearly contemporary Mashhad of Ḥuseyn, 608 (1211-1212). In both we have the typically Syrian treatment, a series of horizontal courses decorated with niches, set straight across the angle and advancing one over the other. In a somewhat later example, the entrance of the Ribâṭ Khânqan, 635 (1237-1238), we have a treatment resembling the pendentives of the nearly contemporary Mausoleum of the ʿAbbâsid Khalifs at Cairo, c. 640 (1242-1243).

II. — THE BRIDGE OVER THE CANAL OF ABÛ L-MUNAGGA[2].

665 (1266-1267).

This Canal was excavated to irrigate the province of Sharqîya, by Shâhanshâh, Wazîr of the Khalif al-Âmir and son of Badr al-Gamâly. It was named

[1] See Viollet, *Un palais musulman du IXe siècle* in the *Mém. de l'Acad. des Inscr. et Belles-Lettres*, t. XII, 2e partie, pl. II and IV; Herzfeld, *Samarra*, Taf. I and Abb. 3 and 4; Miss Bell, *Amurath to Amurath*, Figs. 153-154, etc.

[2] Bibliography : c. 1412, Qalqashandî, p. 28, Wüstenfeld's transl., pp. 27-28; — 1427, Maqrîzî, *Khiṭaṭ*, II, p. 151; and his *Sulûk* in Quatremère, *Sultans Mamlouks*, I b, pp. 40, 60 and 153; — 1522, Ibn Iyâs, *Ta'rîkh*, I, p. 112, l. 4; p. 168, l. 21; II, p. 244, ll. 4-7, and p. 301; — 1692-c. 1708, Maillet (éd. 1735), I, p. 48; — 1801, Sharqâwi, on margin of Isḥâqi, pp. 112-130; — 1812, *Description de l'Égypte, état moderne*, Atlas, pl. 74; *C. R.*, 1887-1888, p. xiv; — 1888, Clermont-Ganneau, *Journal asiatique*, 8e sér., t. XII, p. 308 and plate; reprinted in his *Recueil d'archéologie orientale*, I, p. 398; — 1896, van Berchem, *C. I. A.*, I, pp. 522-525 and pl. XXXV; — 1907, Saladin, *Manuel*, I, p. 117 and fig. 71; — 1919, Creswell, *Brief Chronology, loc. cit.*, XVI, pp. 78-79 and Plate XII; — 1924, Briggs, *op. cit.*, pp. 97-98.

after Abû l-Munagga, a Jewish engineer who was responsible for the execution of the works[1], which were commenced Sunday 6 Shaʿbân 506[2]. It runs N. N. E., is still in use, and has its intake about a mile below Shubra. After a course of about three quarters of a mile it passes under a stone bridge of six arches, of which only the most westerly one has water under it. This bridge is 10 m. 40 wide and 79 m. 60 in length, excluding the modern ramps, of which the eastern measures about 17 m. 50.

The level of this canal is of course, a variable quantity, but at the time of my last visit (1st September 1922) the summit of the south side of the bridge, which here lacks a parapet, was 5 m. 40 above the water. The springing of the arches was covered by the water so that it was not, and perhaps never is, possible to measure the width of the piers. The average span of the six arches, measured as accurately as possible on the water level, was 8 m. 75, so that their actual span is probably about 9 m. 25. This would leave about 4 m. 50 for the width of the piers. The courses of masonry average 32 cm. in height. The voussoirs of the arches vary from 48 cm. to 60 cm. in depth.

There are very considerable differences between the two sides of this bridge. Of the arches on the northern side, commencing from the right, the first two are perfectly plain, the next three have a simple moulding and the last has a denticulated moulding. The latter appears to be a reconstruction of the *Comité,* as a photograph, taken during the works, shows the bridge ending after the third arch with the simple moulding[3]. All the plain arches, with one exception, are built with a single ring of voussoirs, but the first two with the simple moulding are constructed with single and double voussoirs alter-

[1] Maqrîzî, *Khiṭaṭ,* I, p. 487; Ibn Duqmâq, V, p. 46, (who says that water diviners were employed); and van Berchem, *C. I. A.,* I, p. 522. Abû l-Munagga, was head of the Board of Agriculture, and the canal came to be named after him, greatly to the annoyance of the Khalif who, at the opening ceremony, had given it his own name. Qalqashandî, p. 305, Wüstenfeld's transl., p. 27. From some correspondence of Abû l-Munagga, which has actually survived to the present day in the Cairo Geniza, it appears that his name was Solomon. See Jacob Mann, *The Jews in Egypt under the Fāṭimid Caliphs,* I, pp. 215-217.

[2] The 6th corresponds to 27th January 1113, but, if Sunday is correct, it should be the 8th Shaʿbân, corresponding to 29th January. See Wüstenfeld's *Calcaschandî,* p. 27, n. 1.

[3] Moreover, only five arches are mentioned in the *C. R.,* 1887-1888, p. xiv : «On voit encore cinq arches émergeant de terre, dont une seule sert au passage d'un petit canal.....».

nating, and covered by an outer ring on which the moulding is carved. The stones of the main ring are of two colours arranged alternately (in Arabic *ablaq*). In the third moulded arch the voussoirs are single and double alternately, but there is no outer ring, the moulding being carved on the main ring. On the opposite face all the arches are plain.

The summit of the northern façade is decorated with a frieze of lions (or panthers) of which twenty-two still remain in position[1]. All are alike : the head is shown full-face with a heavy square jaw, a moustache, and a pair of almond eyes; in some cases small pointed ears have been preserved. One forepaw is raised in walking and the tail is turned up over the back (Plate VIII A). There appears to be a knot (or ring) in the middle of the tail. Each one is carved on a single block of stone, and they are divided from each other by a plain space composed of a couple of smaller blocks superimposed. The opposite face has no frieze, but the spandrels of the arches are decorated with four great cartouches of Sultan Qâyt-Bây, 1 m. 15 in diameter (Plate VII), and one plain one on the part which I believe to have been rebuilt by the *Comité*.

Date. — Bibars al-Bunduqdârî, according to Ibn Duqmâq and Maqrîzî, had this bridge built by the Emîr ʿIzz-ad-Dîn Aybak Afram in 665 H. (1266-1267)[2]. The cartouches on its southern face, however, show that it has been restored or rebuilt by Qâyt-Bây. Ibn Iyâs[3] says that the arches were in a precarious state and threatening to fall, that the work was carried out in Gumâdâ II, 892 (May-June 1487) by the Sultan's orders under the superintendence of Badr ad-Dîn Ḥasan ibn Ṭûlûnî, and that 7000 dinars were spent on the works. The question immediately arises — what was the extent of Qâyt-Bây's restoration? van Berchem took the view that the bridge was practically rebuilt[4]. In this I do not concur for the following reasons : In the first place

[1] There must have been many more two centuries ago. Maillet, who wrote between 1692 and c. 1708, says : «Ce Pont fut bâti il y a environ trois cens ans par un Roi d'Égypte, dont la devise étoit un Lion, Aussi cet édifice est il semé d'un bout à l'autre de la figure de cet animal». *Description de l'Égypte* (éd. 1735), p. 48.

[2] *Khiṭaṭ*, II, p. 151, and Ibn Duqmâq, V, p. 47, quoted by van Berchem, *C. I. A.*, I, p. 523; also Quatremère, *Sultans Mamlouks*, I B, pp. 44 and 153.

[3] *Ta'rîkh*, II, pp. 244 and 301, and van Berchem, *op. cit.*, p. 523.

[4] *C. I. A.*, I, pp. 524-525.

Qalqashandî[1], writing about 1412, states that it was in good condition in his day. It must therefore have lasted 146 years without material deterioration and it is improbable that 75 years more would suffice to ruin it completely. Secondly, the row of lions or panthers on the northern parapet are admittedly the emblem of Bibars, and I see no reason to assume that they have been replaced by Qâyt-Bây during a supposed re-construction. An examination of the opposite side of the bridge reveals one rather curious feature, viz. : the lower right-hand voussoirs of the second arch from the east end project beyond the present face of the bridge. From this it appears to me to be probable that Qâyt-Bây merely refaced this side of the bridge, carved his cartouches on the new surface and omitted for some reason or other to cut back the lower voussoirs of this arch[2]. Previous to this I believe, on the analogy of the bridge at Ludd[3], that the south side was decorated in the same way as the north.

There is an engraving of this bridge in Napoleon's *Description de l'Égypte*[4], showing both faces. The parapet, which no longer exists, is crowned by a long inscription which runs above the panthers and the cartouches. The characters, which do not make sense and which must therefore be inexactly drawn, are in Kufic. Whether the bridge is due to Bibars or Qâyt-Bây, the inscription, as van Berchem points out, must have been in Naskh[5]. In fact it is safe to assume that it actually was so, as a fragment of an inscription, which has been

[1] P. 306, Wüstenfeld's transl., p. 28, quoted by van Berchem, *op. cit.*, p. 524 n. 2; see also p. 478, for the date of Qalqashandî.

[2] At present everything is so silted up that only the most westerly arch is in use. If we suppose that this silting up process had already commenced before the time of Qâyt-Bây and that the edge of the canal came to this point, the voussoirs in question may well have been covered by the end of a bank of earth dredged from the canal, but not yet carted away and thrown on the land.

[3] Known locally as Jisr Jindâs. For a description of this bridge, see Conder, *Survey of Western Palestine, Memoirs*, III, pp. 264-265; and Clermont-Ganneau, *Notes d'épigraphie et d'histoire arabes*, in the *Journal asiatique*, 8e série, t. X, pp. 509-527, with one plate; XII, pp. 305-310, with two plates. The first part of the latter memoir was reprinted by the author in his *Recueil d'archéologie orientale*, I, pp. 262-279 and an English translation subsequently appeared in his *Archæological Researches in Palestine*, II, pp. 102-118 and 470. See also Quatremère, *Sultans Mamlouks*, I b, p. 119. The bridge is dated Ramaḍân 671 (March-April 1273 .

[4] *État moderne*, Vol. I, pl. 74. It is called the «pont de Beysous» after a village about 2 miles away.

[5] *Op. cit.*, pp. 524-525.

mounted on the south side in the centre, and which was presumably found in the mud of the canal, during the works, is in Naskh.

The Panthers of Bibars. — Rogers Bey has published an extract from Maqrîzî, according to which the armorial badge of Bibars was a lion[1]. Artin Pasha has published another in which Maqrîzî says that this Sultan «had his *Reng* struck on his coins and that this *Reng* was the figure of a lion[2]». This animal however is not really a lion, but most probably a panther, since *bars*, one of the components of Bibars' name, means panther in Turkish. I cannot do better than quote the following note of van Berchem : « . . . . . les noms d'animaux, dans les langues orientales, ne répondent pas toujours à notre classification par espèces; il en résulte parfois des confusions. Ainsi, les armes parlantes du sultan Baibars représentent un *bars*, c'est-à-dire un félin de chasse, panthère ou guépard. Il suffit d'examiner les exemplaires conservés de cet emblème pour s'assurer que ce n'est pas un lion. Cependant, il est généralement admis que l'animal de Baibars est un lion. Pourquoi ? Parce que Maqrîzî dit que son emblème (*rank*) était un *sab*ʿ, mot qui peut s'appliquer à un lion, mais qui désigne une bête féroce en général. Maqrîzî avait vu les armoiries de Baibars; s'il les avait prises pour un lion, il eût sans doute employé le terme propre arabe *asad*. En revanche, il semble avoir ignoré que c'étaient des armes parlantes; car il eût probablement traduit *bars* par *fahd* 'panthère' ou 'guépard de chasse' (voir Dozy, *Supplément*), comme l'a fait l'auteur du lexique publié par M. Houtsma, *Glossar*, p. 11 du texte arabe[3]. »

This emblem was placed by Bibars on many of his buildings in Egypt, Palestine and Syria, of which the following is a list arranged in chronological order.

(1) Cairo. — Madrasa of Bibars. Finished December 1263. Pair of panthers in tympanum of relieving arch over first window in south-western façade (Plate II). Also on boss of brass plated door, of which fragments are preserved in the Victoria and Albert Museum, London. (See above, p. 138.)

[1] *Le blason chez les princes musulmans de l'Égypte*, *B. I. É.*, 2e série, 1880, p. 96, from Maqrîzî, *Khiṭaṭ*, II, p. 146 (he is speaking of the Bridge of Lions).

[2] *Étude du blason en Orient*, p. 66.

[3] Van Berchem and Strzygowski, *Amida*, p. 100, n. 2. See also his *C. I. A.*, I, p. 523, n. 1.

(2) KARAK. — Surrendered to Bibars, 24 Gumâda II, 661 (5 June 1263) and repairs were commenced immediately[1]. A great oblong tower at the northern corner, is called the tower of Bibars on account of the inscription in his name carved upon it. Alongside the inscription were the panthers of Bibars[2], but they have since been removed, and transferred to the Government Head-quarters, where they have been embedded on either side of the doorway, at a height of about 2 m. from the ground. I am able to illustrate them thanks to a photograph kindly sent me by Mr. H. St. J. B. Philby, who has done such invaluable exploration in Arabia (Plate VIII B).

(3) JERUSALEM. — Bâb Sitti Maryam. High up, to right and left, are two panthers passant and affronted, on either side of an ornamental medallion (Plate IX). Van Berchem, who has specially studied the walls and gates of Jerusalem, says that these panthers are certainly not *in situ* because, in all absolutely authentic examples, the panthers are either arranged in a file one behind the other and marching in the same direction, or they are affronted at either end of an inscription. Here they are very close together and are not guarding an inscription. Yet they are very similar to Bibars' panthers. He concludes that they came from a khân which Bibars had built in 662 (1264) just outside the town to the north-west. Mujîr ad-Dîn who records this event, adds a piece of information of great interest; he says that Bibars transported to this khân the gate of the Fâṭimide Palace[3]. This khân, probably in ruins in the XVI^th^ century, must have been pillaged to decorate the gateway, which, in its present form, is due to Sultan Suleymân in 945 (1538-1539)[4].

(4) BIREJIK. — The Citadel. Two great towers on the east side bear inscriptions, hitherto unpublished, each set between a pair of feline animals with their tails turned up over their backs[5].

[1] MAQRÎZÎ, in QUATREMÈRE, *Sultans Mamlouks*, I A, pp. 205-209.

[2] DUC DE LUYNES, *Voyage d'exploration à la Mer Morte*, II, p. 199; and atlas, pl. 12; VAN BERCHEM, *C. I. A., Jérusalem*, I, p. 435, n. 2.

[3] P. 434; SAUVAIRE's transl., p. 239, also MARGOLIOUTH, *Cairo, Jerusalem and Damascus*, p. 208. Maqrîzî says that the gate in question was that known as the Bâb al-'Îd (*Khiṭaṭ*, I, p. 435, ll. 22-23; RAVAISSE, *Essai, loc. cit.*, III, p. 65).

[4] VAN BERCHEM, *C. I. A., Jérusalem*, I, pp. 435 and 445-446. To the sources cited add IBN IYÂS, *Ta'rîkh*, I, p. 111, l. 30.

[5] Hitherto I have not found anybody able to read these inscriptions on my photograph, even with the aid of a magnifying glass.

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The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

I conclude that these inscriptions probably record the work of restoration carried out by order of Bibars in 663 (1264), after the Mongols had raised the siege[1].

(5) Balâṭunus. — Fortress handed over to Bibars in 667 (1269), and repairs commenced immediately. Embedded in the wall of a neighbouring *weli* is a stone, carved with the body of a feline animal almost complete, in style resembling the panthers of Bibars[2].

(6) Qalʿat al-Ḥoṣn, or Crac des Chevaliers. — There are three inscriptions of Bibars : one over the entrance, the others on two round towers at the south-east corners of the enclosure. They are all dated 669 (1271) and each is flanked by two panthers passant[3].

(7) ʿAkkâr. — The south tower of the castle[4] is decorated with a frieze of panthers, and on a Takîya restored in 1020 (1611) is another (Plate X A), taken, according to Sobernheim, from the frieze which decorated the tower[5]. ʿAkkâr was taken by Bibars 29 Ramaḍân 669 (4th May 1271)[6].

(8) Ludd. — Jisr Jindâs. Built, according to a pair of inscriptions, by Bibars in Ramaḍân 671 (March-April 1273)[7]. These two inscriptions, which are placed on either side of the bridge, over the central arch, are each flanked by a pair of feline animals (Plate X B).

(9) Mezerib. — On the pilgrim route, about a mile south of the Semakh—Deraʿâ railway line, is a bridge of three arches known as Jisr al-Maddâd[8]. It is built of black basalt, and on its west face, to right and left of the central arch is a limestone slab, on which is carved a feline animal (Plate XI) with a

(1) Maqrîzî, in Quatremère, *Sultans Mamlouks*, I B, p. 3.

(2) Van Berchem and Fatio, *Voyage en Syrie*, I, pp. 286-287 and Fig. 165.

(3) Rey, *Étude sur l'Archit. militaire des Croisés*, p. 272; van Berchem, *Inscriptions arabes de Syrie, M. I. É.*, III, p. 66 and pl. VI; his *Voyage en Syrie*, I, pp. 124, n. 1, and 148; II, pl. XII and XIV; and Sobernheim, *C. I. A., Syrie du Nord*, pp. 21-22.

(4) Dussaud, *Voyage en Syrie, Rev. archéol.*, IIIe série, t. XXX, p. 306 and Fig. 1.

(5) Sobernheim, *op. cit.*, p. 6 and Fig. 1, and Dussaud, p. 308.

(6) Maqrîzî, in Quatremère, *Sultans Mamlouks*, I B, p. 85; and Sobernheim, *op. cit.*, p. 4.

(7) For Bibliography, see above, p. 146, n. 3.

(8) According to Schumacher, *Ergebnisse meine Reise durch Hauran, Z. D. P. V.*, 1893, pp. 78-79.

perfectly circular head, turned full face, playing with a similar head which is lying on the ground[1]. It will be observed that we have here a type of feline, differing from those on the Bridge of Abû l-Munagga, but very similar, in pose and shape of head, to those on the bridge at Ludd, except that the work is much rougher, the stone inferior, and the decorative treatment of the shoulder is omitted. Nevertheless there can be little doubt that they are the work of Bibars[2].

(10) Qal'at Ibn Ma'ân. — This extraordinary fort is situated in the cliffs on the south side of the Wady Ḥamân at the point where it enters the plain at the north-west corner of lake Tiberias. The total height of the cliffs here is about 1000 feet above the valley; of this height about 600 feet consists of a steep slope, whereas the last three or four hundred feet are perpendicular. The fort has been formed by throwing walls across a number of caves and clefts in the cliff a few hundred feet below the summit. There are traces of a flight of steps near the summit of the slope, and these steps evidently led to the entrance, which is now merely a gap in the masonry, the flanking towers, seen here fifty years ago[3], having completely disappeared. There are several levels in the fort and one ascends, first towards the east, then towards the west and then back again, by staircases, some in the open and some covered by rising tunnel vaults of pointed section (see Plate XXIX b). The walls are provided with deeply splayed arrow slits. Colonel Conder, at the time of his visit (between 1871 and 1878), saw a large block of blue lime-stone, embedded in the wall above the lower door-way, «with the carved representation of two lions facing one another, one front paw of each being placed on some undistinguishable object»[4]. From his sketch (Fig. 4) it would appear that

[1] Schumacher describes these animals as lions holding a terrestrial globe or sun between their forefeet.

[2] I do not suggest that they are *in situ*. The bridge has been reconstructed during the last forty years, according to an inscription on a slab in the parapet, dated ١٣**. The last two figures have disappeared, but 1300 H., began in November 1882. I believe that the piers alone are original, and that the carved slabs, which undoubtedly once flanked an inscription, have merely been embedded in the new construction.

[3] By Sir Charles Wilson; see his *Recovery of Jerusalem*, p. 355; quoted by Conder, *Survey of Western Palestine*, I, p. 410. This fort is illustrated in Guérin, *La Terre Sainte*, p. 318.

[4] *Ibid.*, I was informed in 1920 by Père Wendelin of Tabga (Capernaum) that this slab disappeared shortly after 1888.

they were similar to those on the bridge at Mezerib, and for this reason I attribute the fort to Bibars [1].

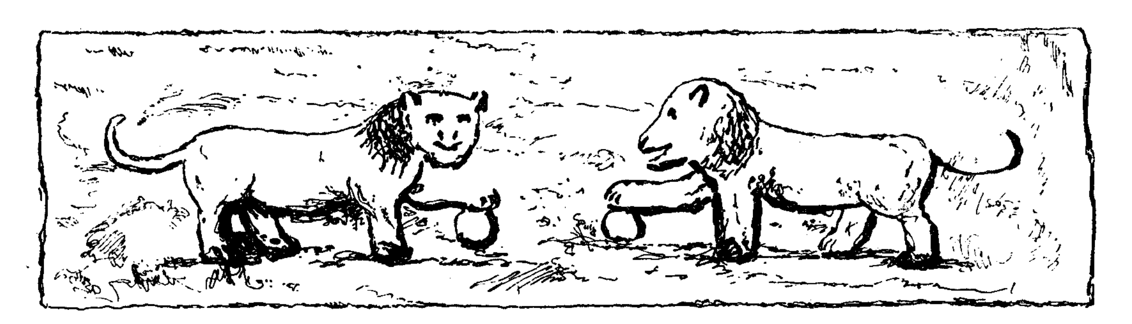


Fig. 4. — Panthers of Bibars (?) at Qal'at ibn Ma'ân. [From the *Survey of Western Palestine*.]

(11) Damascus. — Tower outside the East Gate (*Bâb ash-Sharqi*). Belon du Mans says : « Du costé de levant il y a une tour quarrée, au haut de laquelle y a une inscription en caracteres Arabiques, qu'on dict y avoir esté mise depuis qu'elle fut reprinse des mains des Chrestiens : Car un peu plus bas lon voit deux liz entaillez sur marbre, qui sont les armes de France ou Florence. Au coste desquelles est un lion, qui a faict penser à plusieurs que ce fussent les armoiries de France & Florence [2]. » D'Arvieux speaks of two lions and adds that an inscription in Arabic was placed between [3]. There can be little doubt that the lions in question were the panthers of Bibars, but their association with the fleur-de-lys, the arms of Nûr ad-Dîn, is curious. This tower was destroyed by Ibrahîm Pasha, and the materials used for the erection of a barracks, but Porter, in 1850, says that one of the lions, carved on a slab, was still to be seen embedded in a modern wall close by [4]. I shall conclude this series with three Egyptian examples.

[1] Conder suggested the xv[th] century as the probable date, and he states that similar masonry is found in the great khâns on the Damascus road, such as Khân at-Tujjar, Khân Minia and Khân Jubb Yûsuf. This is not the case; the masonry of the last two is inferior and I believe late, and that of the two buildings at Khân at-Tujjar is rusticated. A fourth, Khân al-Aḥmar at Baisân, is dated 708 (1308). See Jaussen, in the *B. I. F. A. O.*, XXII, pp. 99-103.

[2] *Les Observations de plusieurs Singularitez... en Grece, Asie, etc.*, p. 149 v°.

[3] *Mémoires*, II, p. 445.

[4] *Five Years at Damascus*, I, p. 41.

(12) Cairo. — The famous *Bridge of Lions* (al-Qanṭarat as-Sibâʿ), built by Bibars over the Khalîg, near the Mosque of Sayeda Zeynab, took its name from the animals — evidently the panthers of Bibars — with which it was decorated [1]. This bridge, which consisted of a single arch of great height, was destroyed by an-Nâṣir Muḥammad, not because there was anything wrong with it, but simply because he was jealous, Maqrîzî says, of any architectural achievement of his predecessors. The panthers must have been preserved and embedded in the new bridge, for Maqrîzî says [2] that «a certain person called Sheykh Muḥammad Sāim-ad-Dahr, one of the Sûfis of the Khânqâ aṣ-Ṣāliḥîya, disfigured the faces of the two lions carved on the Qanāṭir as-Sibaʿ, and the face of Abû l-Hôl (=the Sphinx) about 780 (1378-1379)». From the account of Maillet (1692-c. 1708) it would appear that the animals were no longer to be seen in his day. The new bridge, which was lower and wider than the old one, still existed at the time of the French Expedition, but it has since disappeared.

(13) Qaṣr al-ʿUmayd (see below, pp. 191-192). — Over the entrance of this fort, before its destruction in the seventies of last century, was an inscription in the name of Bibars, accompanied by two animals intended, no doubt, for the panthers which he had chosen for his arms [3].

(14) Rogers, in his memoir already cited says that in his day there existed at Cairo near the Bâb al-Hassanîyeh (Ḥuseynîya) a garden called «Geneinet es sabaʿ wa ad dabaʿ» *garden of the lion and the hyena* [4]. The garden gate, of which he gives a photograph (to face p. 110) was decorated with a pair of heraldic animals passant and affronted, which are now in the Arab Museum. Van Berchem has expressed a doubt as to whether these animals are due to

[1] Maqrîzî, *Khiṭaṭ*, II, p. 146; Quatremère, *Sultans Mamlouks*, I b, p. 153; Ibn Shâkir, *Fawât al-wafayât*, p. 89, l. 22; Ibn Iyâs, *Tâ'rîkh*, I, p. 112, l. 5; Maillet (éd. 1735), p. 48; *Description de l'Égypte, état moderne*, XVIII, 2e partie, p. 302; al-Gabartî (French transl.), VII, p. 120 (mention only); Marcel, *Égypte*, p. 166; Rogers, *op. cit.*, *B. I. É.*, 1880, pp. 95-96; Ravaisse, *Essai*, *loc. cit.*, I, pp. 417-418; and Margoliouth, *Cairo, Jerusalem and Damascus*, p. 71.

[2] *Khiṭaṭ*, II, p. 177, transl. by Lane in *Cairo Fifty Years Ago*, pp. 16-17.

[3] Bayle St. John, *Adventures in the Libyan Desert*, p. 173. See below, pp. 191-192, for verbatim extract.

[4] *B. I. É.*, 1880, p. 109. See also Artin Pasha, pp. 60-61 and Figs. I and II.

Bibars[1], but I believe them to be his, in support of which opinion I will cite two facts hitherto neglected (1) the Ḥuseynîya quarter was much patronised by Bibars, who was fond of riding and shooting there, and Ibn Iyâs expressly mentions a garden which he made there[2], and (2) the decorative treatment of the shoulder of these two animals bears a distinct resemblance to that adopted at Ludd (see Plate X B)[3].

There remain two other examples which may also be due to Bibars.

(*a*) At Urfa. — On the rear face of the entrance to the Citadel is the animal shown on Plate VIII C, and

(*b*) At Damascus. — Separated by a narrow street from the Mausoleum of the Emîr Qaymârî at Ṣâliḥîyya, is a modern building with a lintel over the door-way, decorated as shown on Plate XII A. The animals may well be a version of the panthers of Bibars, but, if so, how explain the fleur-de-lys, which was the blason of Nûr ad-Dîn[4]?

As for the pair of animals carved on the rear face of the Bâb al-ʿAzab at the Citadel, and the three belonging to the Great Aqueduct, the former cannot be earlier than 1168 (1754-1755), as they are carved, not on slabs inserted in the wall, but on the actual stones of the gateway, which was built by Riḍwân Kikhya in that year[5]. Van Berchem has given good reasons for believing that the crude and debased representations carved on the Great Aqueduct are of the Ottoman period[6]. I have no doubt that two of them (now in the Museum of Arab Art), which once formed supporters to an inscription recording repairs

[1] *C. I. A.*, I, p. 523, n. 1.

[2] *Ta'rîkh*, I, p. 112, l. 1. It is true that he says «at Abbassîya», but that is merely an extension of the Ḥuseynîya quarter.

[3] I must add, however, that M. Flury, basing his judgment on the freedom of movement, the palmette on the haunches, and the medallion on the shoulder, has suggested to me that this animal should rather be placed in the late Fâṭimide period.

[4] It is to be found over the miḥrâb of his Maristân at Damascus. This was first pointed out to me by M. de Lorey, who made the discovery in the following manner. In the south lîwân, he had noticed traces of a frieze which had been plastered over. On removing the plaster he found that the frieze, which consisted of conventionalised floral scrolls, ran all round, and that it was broken immediately over the miḥrâb by a large fleur-de-lys.

[5] Al-Gabartî, French transl., II, p. 125. One is illustrated in Artin Pasha, *op. cit.*, chap. v, No. 15.

[6] *C. I. A.*, I, pp. 590-591.

by ʿAbdy Pasha in 1140 (1728), are of that date, likewise the third, set in a buttress next the railway line to Ḥelwân [1].

III. — THE MOSQUE OF SULTAN BIBARS [2].

According to Maqrîzî [3] it was in Rabîʿ II, 665 (January 1267), that the Sultan decreed the construction of this mosque. This date is confirmed by an inscription on a slab over the door-way at the back of the north western entrance porch [4]. He sent the Atâbeg Faris ad-Dîn Aktaî and Fakhr ad-Dîn Muḥammad to choose a suitable site, but was furious when they came back and suggested taking a camping ground for camels. He thereupon decided to give up his own polo-ground beyond the Ḥuseynîya suburb for the purpose, went to the spot Rabîʿ II (6th January 1267), and had the mosque marked out on the

[1] See my *Brief Chronology, loc. cit.*, pp. 91-92. The animal on the buttress is illustrated in Artin Pasha, *op. cit.*, chap. v, No. 19.

[2] Bibliography : 1427, Maqrîzî, *Khiṭaṭ*, II, pp. 299-300 and 303, l. 22 and his *Sulûk* in Quatremère, *Sultans Mamlouks*, I b, pp. 38-39, 49-50, 51, 59 and 80-81; — 1497, as-Suyûṭî, Jarrett's transl., p. 507; — 1801, Sharqâwi, on margin of Isḥâqi, p. 122; — 1812, *Description de l'Égypte, état moderne*, XVIII, 2e partie, pp. 122, 311 and 316, and Atlas, I, pl. 27; — 1821, al-Gabartî (Bulâq transl.), VI, pp. 71 and 193; VII, pp. 17, 20 and 185; VIII, p. 365; — 1846, Marcel, *Égypte*, p. 166; — 1863, Paton, *Egyptian Revolution*, II, pp. 329-330; — 1877, Prisse d'Avennes, *L'Art arabe, Texte*, pp. 102-104, and Atlas, pl. VIII; — 1886, Lane-Poole, *Art of the Saracens*, pp. 186-187 and Figs. 83-86: — 1887, Adamy, *Architektonik*, p. 43; — 1888, ʿAly Pasha Mubârak, *Khiṭaṭ al-Gedida*, V, pp. 42-43; — 1893, Gayet, *L'Art arabe*, pp. 118-119; — 1896, Lane (E. W.), *Cairo Fifty Years Ago*, p. 153; and van Berchem, *C. I. A.*, I, pp. 121-123; — 1903, Franz Pasha, *Kairo*, pp. 49-50, with illus.; — 1907, Saladin, *Manuel*, I, p. 117 and Fig. 70; — 1907, Margoliouth, *Cairo, Jerusalem and Damascus*, p. 70; — 1909, Fago, *Arte araba*, pp. 139-141; — 1911, Spiers (R. Phené), *J. R. I. B. A.*, Vol. XVIII, Third Series, pp. 129-130; — 1912, Spiers, *Mosque of El Zahir, ibid.*, XIX, p. 345; — 1915, Diez, *Die Kunst der islamischen Völker*, pp. 57-58, and Abb. 78; — 1917, Devonshire (Mrs. R. L.), *Rambles in Cairo*, pp. 35-41, with 3 illustrations; — 1919, Creswell, *Brief Chronology, loc. cit.*, XVI, pp. 79-80; — 1922, Patricolo, in the *C. R.*, 1915-1919, pp. 47-48, and pl. XXXVI-XL; — 1923, Tarchi, *Architettura Musulmana*, tav. 46 and 47, and 2 illus. on p. 11; — 1924, Briggs, *Muhammadan Architecture*, pp. 96-97, 190 and 223, and Figs. 52-56, 58, 59 and 232.

[3] *Khiṭaṭ*, II, p. 299. Similar account in Quatremère, *Sultans Mamlouks*, I b, pp. 38-39, 51, 59, and 80-81. See also as-Suyûṭî, Jarrett's transl., p. 507.

[4] Van Berchem, *C. I. A.*, I, p. 121.

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The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

ground. He gave instructions that the entrance should be made like the entrance of his madrasa (this was not done) and that the dome should be of the same size as that over the mausoleum of Imâm ash-Shâfʿey.

Maqrîzî says that the construction began in the middle of Gumâdâ II, 666 (the 15th corresponds to 3rd March 1268). On 20 Gumâdâ II (8th March 1268) the Sultan stormed Jaffa and decided to utilize the timber and marble carried off from edifices there, the timber for the maqṣûra and the marble for the miḥrâb. The date 666 occurs on a slab over the south-western entrance, and another inscription, on a great slab of lime-stone over the miḥrâb, gives 666 as the date of the dome[1] which, unfortunately, no longer exists. The timber and marble were sent to Egypt by sea. Maqrîzî goes on to say that on 1 Muḥarram 667 (10th September 1268) the Sultan inspected the works, and that the mosque was finished and inaugurated on 2 Shauwâl 668 (25th May 1270).

Description of mosque. — Although almost eviscerated, owing first to neglect and afterwards to misuse as fort[2], bakehouse[3] and rationing depot for the British Army of Occupation[4], the Mosque of az-Ẓâhir Bibars still

[1] Van Berchem, *C. I. A.*, I, pp. 122-123.

[2] It was named Fort Sulkowski, after one of Napoleon's Aides-de-Camp, a Pole who was killed in the insurrection. See the *Description de l'Égypte, état moderne*, XVIII, 2e partie, p. 316. Al-Gabartî says that it was converted into a fortress in Gumâdâ II, 1213 (November-December 1798), and that cannon were placed on its roof. The minaret became a tower and the interior was turned into a barracks. He adds, however, that it had fallen into ruin long before, and been neglected by the Nâzirs of the Waqfs, who had sold many of its pillars as well as the lands forming part of its endowment, *op. cit.*, French transl., p. 71; see also p. 193. He speaks of it (VII, pp. 17 and 20) as a fort in 1216 (1801), and again (VII, p. 185) in Ṣafar 1218 (May-June 1803). He says (VIII, p. 365) that more columns were carried away in 1217 (1802-1803). Still more were carried away to decorate Qaṣr an-Nîl. Prisse d'Avennes, *L'Art arabe, Texte*, p. 102.

[3] A military bakehouse was installed here by Muḥammad ʿAly, according to Paton (A. A.), *History of the Egyptian Revolution*, II, p. 330; ʿAly Pasha Mubârak, *op. cit.*, V, p. 43, l. 18; and Margoliouth, *Cairo, Jerusalem and Damascus*, p. 70, but it was removed by the Khedive Ismâʿîl, and the mosque appears to have been in a completely derelict state when Prisse d'Avennes saw it. *Op. cit., Texte* (published in 1877), pp. 102-104.

[4] Franz Pascha, *Kairo* (1903), p. 49; and Margoliouth, *op. cit.*, p. 70. Its rescue from misuse, and the removal from its interior of a number of mean buildings, its entirely due to the initiative of H. M. King Fuad, and is one of the many proofs he has given of the keen interest which he takes in the beautiful monuments of Cairo. At his instance the interior was entirely

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commands admiration by its simplicity of line, by the dignity of its monumental gate-ways, and the beauty and restraint of its crisply carved ornament.

It consists of a great rectangle a little over 100 meters square internally[1], enclosed by stone walls 10 m. 96 in height surmounted by merlons measuring 1 m. 30, with a projecting monumental gate-way on three of its faces (Plate XII). The north-west gate-way is placed in the centre of that side, but the lateral entrances, instead of being in the centre of the north-eastern and south-western façades, are so placed as to come opposite the centre of the corresponding sides of the ṣaḥn (Fig. 5). The interior arcades were six deep on the qibla side, three deep to north-east and south-west and only two deep on the north-west side. This arrangement is nearly the same as that found in the Mosque of al-Ḥâkim (5 : 3 : 3 : 2), but a novel feature appears in the arrangement of the lîwân qiblî, where there is a great clear space, three bays by three, in front of the miḥrâb, which, as we learn from Maqrîzî[2], was once covered by a wooden dome of the same size as that over the Mausoleum of Imâm ash-Shâf'ey. The arcades rested some on columns and some on piers as shown, but very few of the latter remain[3].

The main Gate-way (Plate XIII) is a handsome structure, 11 m. 82 wide, with a projection of 8 m. 86. There is a fine entrance arch 3 m. 95 in width, with cushion voussoirs, once supported by a pair of engaged columns, and flanked by a deep niche with a conch shell hood, set in a shallow rectangular bay with a stalactite head framed in arabesque (Plate XVII A). In the spandrels directly above these niches is a fluted, keel-arched niche, with a circular med-

cleared in 1920, and a garden laid out by the Tanzîm Department in the part not occupied by the remains of the lîwân qiblî.

[1] N.-E. side = 106 m. 30; S.-W. = 105 m. 94; N.-W. = 103 m. 53; S.-E. = 102 m. 95. It is not a true rectangle, being distorted to such an extent that the west corner is 2 m. 20 to the right of its true position.

[2] *Khiṭaṭ*, II, p. 300; Prisse d'Avennes, *op. cit., Texte*, p. 103; Gayet, *L'Art arabe*, p. 118; Margoliouth, *op. cit.*, p. 70. Maqrîzî's statement is not a mere figure of speech. The average length of the four sides of Imâm ash-Shâf'ey's mausoleum is 15 m. 17. The average on the four sides of Bibars' *maqṣûra* is 15 m. 46, a difference of 29 cm. only.

[3] The piers shown on the plan as «piers built by the Tanzim» are dummy piers of red brick, about a metre high, intended to show the original plan of the mosque. Some *may* have been built on foundations actually existing, but this is not certain, and I can get no first hand information on the point.

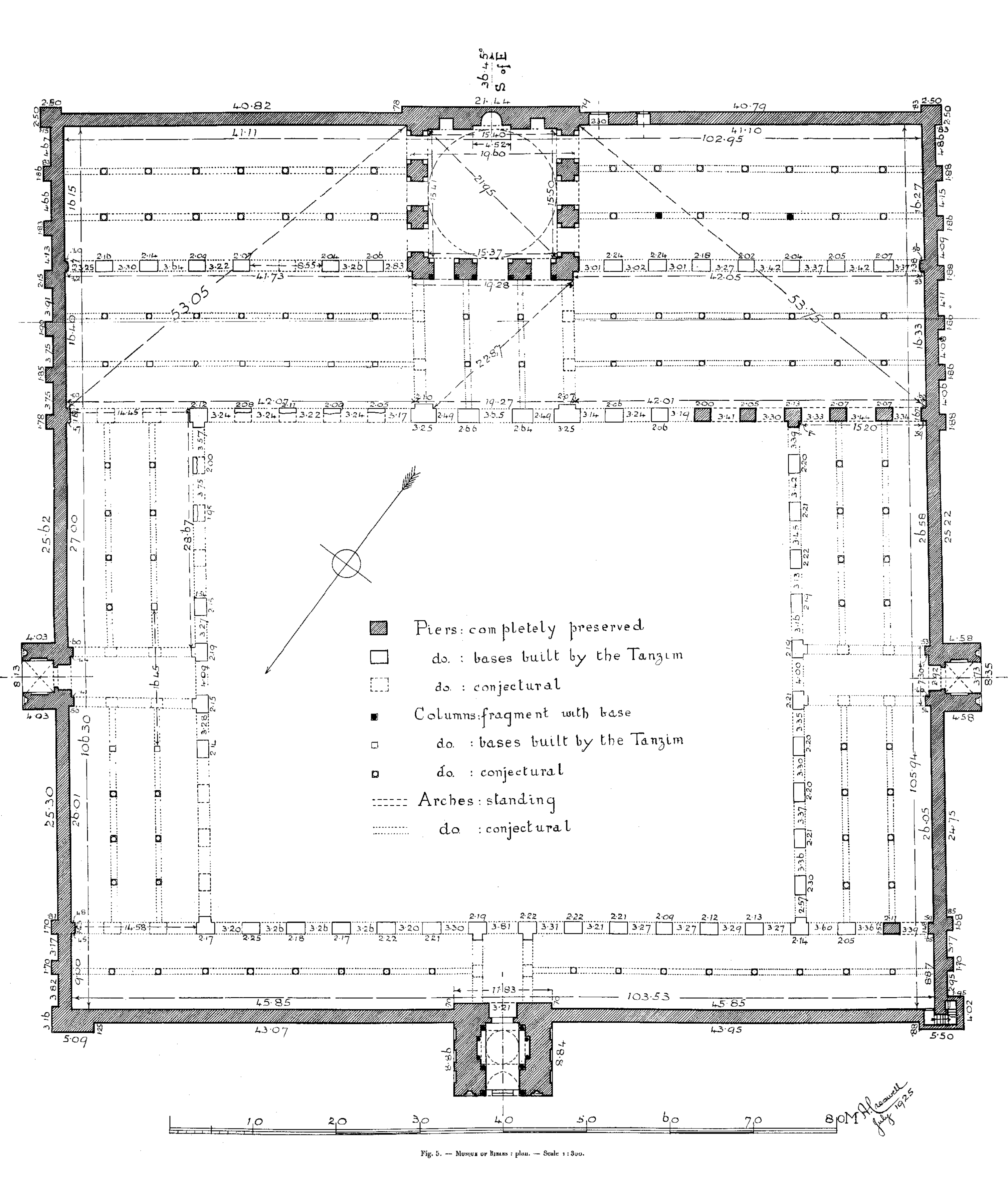


Fig. 5. — Mosquée de Bibars : plan. — Scale 1 : 800.

allion in the centre and a band of guilloché running round its outer edge. Between these two panels and the apex of the arch are two sentences from the Qurân, each set in a small frame composed of interlaced squares.

The flanks are each decorated with three keel-arched panels with a circular medallion in the centre of each hood (Plate XIV). The wall surface above these niches is occupied by eight small, raised squares of arabesque, placed lozenge-wise, and three large raised medallions decorated with an interlacing star pattern.

The passage-way is flanked to right and left by a shallow recess with the base of a column in each corner; the column, however, is missing. Within each recess is a deeper recess decorated above with the curious ornament shown

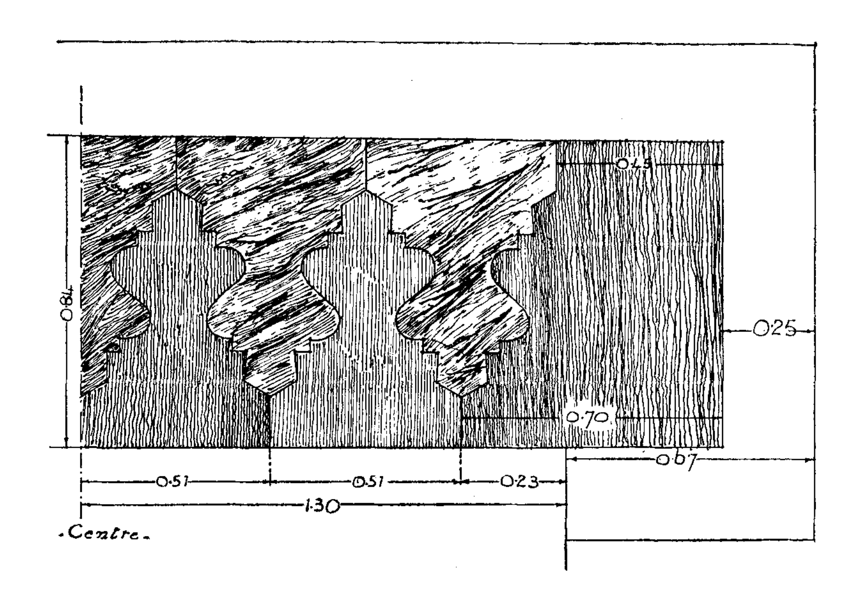


Fig. 6. — Lintel of main entrance. — Scale 1 : 20.
[By kind permission of Mr. G. Rossi.]

in Plate XV. There must also have been a pair of columns in these recesses to support the arched hood. This entrance passage is roofed by a shallow dome of cut stone supported by spherical-triangle pendentives of the same curvature (Plates XVI and XVII b). At the inner end of the passage-way is a rectangular door-way spanned by a joggled lintel of marble and yellowish stone

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alternately (Fig. 6), with a relieving arch, hollowed underneath but horizontal above. Its key-stone is decorated with a small but much corroded motive. In the tympanum above is a slab with a Naskh inscription of five lines (No. 78 of the *C. I. A.*).

The rear face of the main gate-way makes a slight salient on the curtain walls, and the rectangular door-way by which we leave the domed entrance bay is set in a pointed arched recess (Plate XXIII A). Above this is a panel of beautiful stucco ornament composed of three broad, pointed-arched panels, simulating lattices, and two narrow ones (Plate XXIV). On top of the gate-way are the remains of two sides of a very low, cross-vaulted room, but the annexed illustration (Fig. 7) taken from Napoleon's *Description* shows that in his day there still existed the lower part of a square minaret, decorated with a keel-arched panel similar to those flanking the archway below.

The north-eastern Gate-way (Plate XVIII A) is smaller than the main one, being only 8 m. 13 wide with a projection of 4 m. 03. There is a fine entrance arch, 3 m. 73 in width slightly set forward on corbels. The voussoirs are decorated with a double chevron, framed in a border of arabesque (Plate XIX). The entrance is flanked to right and left by a semi-circular recess with a conch-shell head, set in a shallow panel with a rectangular stalactite head framed with a band of elaborate ornament. In the spandrels of the arch, above these two niches, are two really fine and well-preserved medallions, the ornament of which recalls that of the medallion on the flank of Sultan aṣ-Ṣâliḥ Negm ad-Dîn's mausoleum.

The entrance bay, which is covered by a cross-vault, is flanked to right and left by shallow recesses with scalloped-arched heads. These arches are slightly horse-shoed in shape, and in the centre of each is a raised square, set lozenge-wise and decorated with elaborate ornament (Plate XVIII B).

The flanks are almost plain, except for a fine circular medallion (similar to those in the spandrels), above and below which is a decorated raised square placed lozenge-wise. Although nearly plain, the flanks are nevertheless remarkable for the striped effect obtained by using stone of two different colours in alternate courses. This technique, called *ablaq* in Arabic, here makes its appearance in Egypt for the second time.

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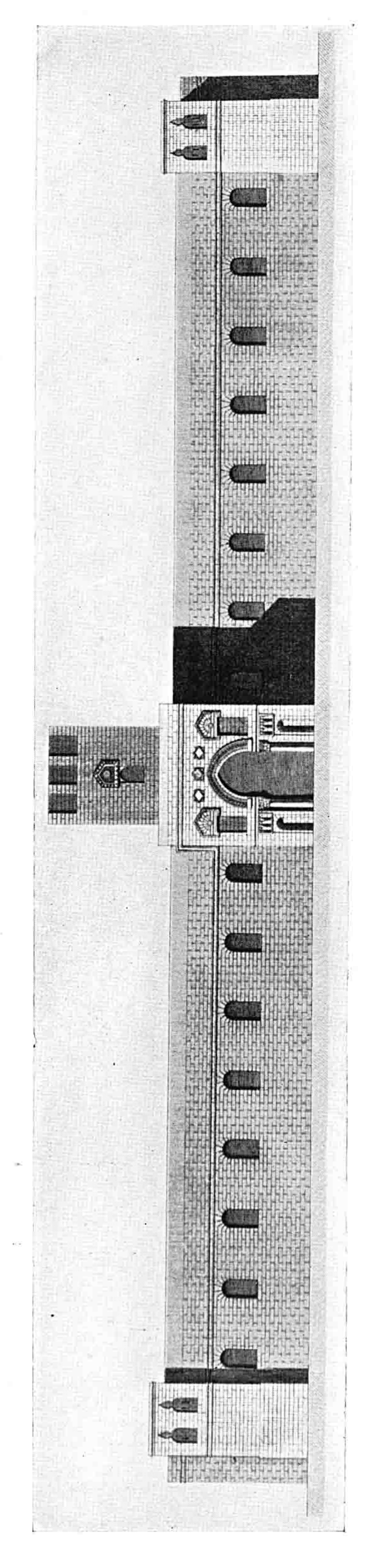


Fig. 7. — Mosque of Sultan Bibars : north-west façade in 1800. [From the *Description de l'Égypte*.]

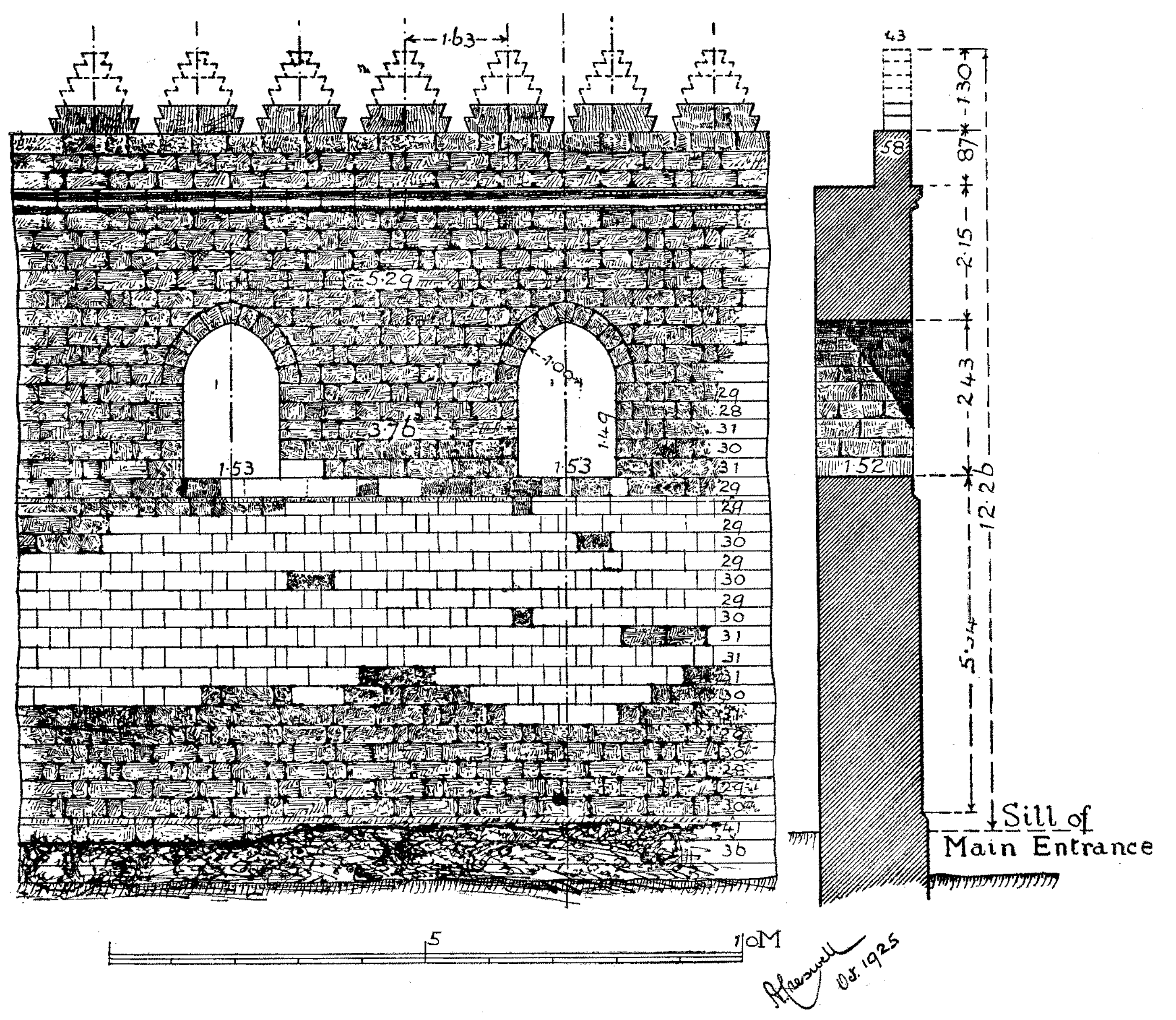


Fig. 8. — Mosque of Bibars, detail of Curtain Wall. — Scale 1 : 200.

At the back of the entrance bay is a rectangular door-way spanned by a joggled lintel, composed of stones of two colours arranged alternately, and a relieving arch of three stones only, hollowed below but horizontal above. A band of inscription, probably Qurânic, runs along the top of the lintel and round the outer edge of the tympanum formed by the end of the vault. In the centre is a slab with a Naskh inscription of eight lines (No. 76 of the *C. I. A.*), within a border of arabesque carved in two planes only.

The south-western Gate-way (Plate XX) although slightly larger, than its fellow, is similar in general design to that just described with the following small points of difference :

(1) The entrance arch has a scalloped border carved in slight relief on the voussoirs, and slightly set back from the intrados.

(2) The upper part of each flank is occupied by a large, slightly sunk panel. This panel is occupied by a medallion and one lozenge only.

(3) The striped effect is limited to the part below this panel.

(4) The medallions are decorated with a circle of inscription instead of arabesque (Plate XXII).

(5) The tympanum at the back of the entrance bay is occupied by a scalloped arch corresponding to those at the sides (Plate XXI). In the centre of this arch is a slab with an inscription of six (originally eight) lines (No. 77 of the *C. I. A.*).

The Curtain Walls (Fig. 8) measure 9 m. 92 in height from the top of the lowest bevel to the upper edge of the cornice (Fig. 9), above which are three more courses (totalling 87 cm.) once crowned by stepped crenellations, of which a few only have been partly preserved on the south-east side. The latter, where restored, measure 1 m. 30, which gives 12 m. 09 as the total height, or 17 cm. more, i. e. 12 m. 26 if measured from the sill of the main entrance. This wall measures 1 m. 65 in thickness above the offset of 10 cm. on which it rests. One course below the sill of the windows it is reduced to 1 m. 52 by a slight bevel. It is composed of rubble, faced externally by dressed stone blocks, the courses averaging 30 cm. in height, and internally by *talates*.

The outer faces are much thinner than they ought to be, hence the amount of re-facing which has been found necessary. The west and north corners of the mosque are strengthened by rectangular towers; the northern is solid, but the other forms the cage of a staircase leading to the roof. This staircase is lit by four little windows on its north-western side, but by two only on its south-western and south-eastern faces. It should be noted that these eight little windows are all covered by arcuated lintels, a Syrian feature to be seen in the fortifications of Badr al-Gamâly. Each tower has been partly preserved to a height of four courses above the main cornice, and in the two outer faces is the lower part of what appears to have been a very narrow window set in a shallow recess.

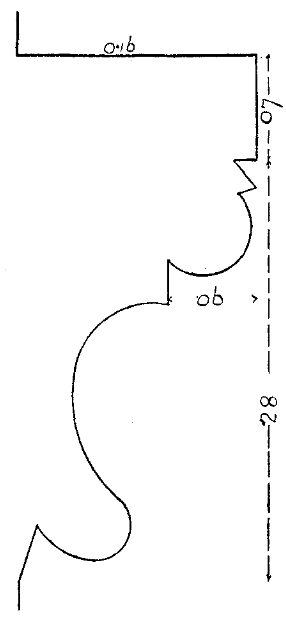


Fig. 9.
Mosque of Bibars, cornice.
Scale 1 : 5.

In the interior, in the north and south corners, high up, is part of a vault of well cut stone; each vault partly obstructs a window. Now Napoleon's plan shows a staircase in these corners running up the north-west and south-east walls in one long straight ascent. Possibly this fragment of vaulting is a remnant of it. The east and south corners are also strengthened by towers, but they are solid and much smaller.

At the north-west end of each flank are two buttresses, 85 cm. deep and 1 m. 70 wide, to receive the thrust of the arcades; one is bevelled off below the cornice, but the other is carried through it to the summit of the curtain wall. At the south-east end of each flank are six buttresses to receive the thrust of the arcades of the lîwân qiblî; four are bevelled off below the cornice but the other two are carried through it to the summit of the curtain wall. In each of these buttresses, in the third course below the windows, may be seen the end of a column, let in as a bond; this is the last example of this technique in Egypt. I shall refer to it again on p. 187 ff.

The Windows. — The curtain walls are pierced in their upper half with 72 pointed-arched windows, of which there are 18 in each

side[1]. These windows had grilles on their outer and inner edges, in both cases flush with the wall surface. None have been preserved intact, and, of the small fragments that remain, the finest and best preserved is the central one on the outer face of the curtain wall between the main entrance and the north corner (Plate XXIII B). It is most fortunate that this one has partly survived, as it provides another example of a XIIIth century scalloped arch in Egypt, strikingly similar to that of the panels on the minaret of the Great Mosque at Aleppo. Similar scalloped-arched panels appear fifteen years later in the Mausoleum of Sultan Qalâûn, where they form starting points for the bands of ornament decorating the intrados of the arches joining the central octagon to the outer square. The grilles of the windows, judging from the fragments which remain[2], were evidently quite unlike those in Qalâûn's complex, or those which Lagîn added to the Mosque of Ibn Ṭûlûn, when he restored it in 696 (1296). Although of stucco, they appear to have been closely related to the stone grilles which, in the Madrasa-Mausoleum of Salâr and Sangar al-Gawly (703 H = 1303) separate the corridor from the ṣaḥn. Another example of similar work may be mentioned — the stucco panel with which Bibars al-Gashankîr, when he restored the Mosque of al-Ḥâkim in 703 (1304), covered over the Fâṭimide ornament on the left hand panel[3] of the substructure of the dome.

The Piers of the interior have almost all disappeared except those of the *maqṣûra* (Plate XXV), a file of five, complete with their arches, forming the south-western end of the outer arcade of the sanctuary, and one, with its arch, in the western corner. All the arches had wooden ties, some of which

[1] This simple fact was too much for Jomard who shows 16 only in the north-west façade. See the *Description de l'Égypte, état moderne*, Atlas, pl. 27. Prisse d'Avennes, who says with truth (*Texte*, p. 103) : «Le dessin publié dans le grand ouvrage de l'expédition française est très inexact et donne une idée fort incomplète de ce beau monument», falls into the same error in his elevation of this façade! *op. cit.*, pl. 8.

[2] Most of the fragments which have been preserved on the inner face are to be found in the eastern part of the sanctuary.

[3] He covered up both the left and right-hand panels, but the covering of the latter has been removed, revealing the Fâṭimide panel beneath. See Flury, *Die Ornamente der Hâkim- und Azhar-Moschee*, pp. 23-25 and Taf. VI and XXII 4.

still remain. Piers, wall-piers, and arches are of red brick, the piers averaging 1 m. 67 × 2 m. 08, the arches 3 m. 36 in span and 8 meters in height. At the south-east end of each side wall may be observed the springing of six arches, proving that the sanctuary was six arcades deep. The third and sixth arches from the back wall are broader than the rest and spring from brick wall piers, whereas the others spring from the wall without piers. The third, which has an engaged column in brick at each corner, belongs to the prolongation of the arcade forming the front face of the maqṣûra, which we must now consider.

The Maqṣûra (Plate XXV), as we have already remarked, is of extraordinary size, occupying no less than nine bays (3 × 3) and measuring roughly 15 m. 50 square internally. Its front and flanks are formed by three arches, the centre one in each case being open for its full height; the side ones are partly closed up above by a thin tympanum of brick, built on a beam carried across at the springing of the arch, and pierced with a window.

Each pier appears to have had engaged columns at each corner, but they are missing in every case except on the front face, where six bases, surmounted by fragments of marble columns, have been inserted. These bases and columns were recovered when the interior of the mosque was cleared, and many shafts not yet employed are still lying on the ground near the south-western entrance. The spring of three arches may be observed on each flank and four more on the front face. The latter prove that there was a *triple transept* leading from the ṣaḥn to the maqṣûra. The arrangement shown on the *Comité*'s plan (*C. R.*, 1915-1919, pl. XXXVI) is therefore incorrect. The arches, two narrow and one broad, springing from the flanks, correspond to the first three back arcades of the sanctuary. Just as the arcade formed by the prolongation of the front face of the maqṣûra was broader than the rest, so of the four arches springing from the front face, the two outer, which form a prolongation of the sides of the maqṣûra, are broader also. The object, apparently, was to provide ample abutment to the corners of the maqṣûra.

At the back of the latter is the great recess of the miḥrâb, now destitute of any decorative coating, but it is clear that provision has been made, as

usual, for a pair of engaged columns. Above the miḥrâb is a white marble slab with a Naskh inscription of four lines (No. 79 of the *C. I. A.*). To right and left of the miḥrâb is a recess with a window above.

On the north-west side of the ṣaḥn the arcades were only two deep as is shown by the presence on the north-east wall of two arches, the outer 1 m. 43 in width and springing from a wall pier, the inner narrower (70 cm.) and springing from the wall only. At the opposite end, the first pier and arch of the outer row have been preserved intact. The upper part of the north-east wall is intact between the outer pier of the north-west *riwâq* and the outer pier of the sanctuary, but there is no sign of the springing of an arch, except on either side of the north-east entrance, which is flanked by two piers. There was therefore a transept leading from this entrance to the ṣaḥn, and also from the opposite entrance, which is also flanked by two piers, one of which still exhibits the springing of an arch.

The rear face of the main entrance is not flanked by such piers; nevertheless to right and left, high up, may still be seen the springing of an arch, proving that there was a transept from this entrance also. But unlike the others, its ceiling must have been raised above the general roof level. This is proved by the fact that the panelled rectangle of stucco ornament, already referred to, rises well above the general roof level, which must have been below the lowest opening in the merlons. The lower edge of the panel of ornament is about 30 cm. below this point, but its upper edge is considerably above it.

The number of arcades in the side aisles may be determined with certainty, thanks to the fortunate preservation of the file of five arches belonging to the outer arcade of the sanctuary. On the third pier from the south-western wall is a pilaster 1 m. 43 broad and 70 cm. deep, with the springing of an arch above. The two piers between it and the wall are without pilasters, but the springing of a much narrower arch has been preserved in each case. The side arcades were therefore three deep, and consisted of a broad outer row of arches and two narrower ones.

All these rows of piers and columns rest on continuous foundations, about 2. m. 80 deep, as may be seen from the excavations now (Aug. 1925) in progress in the right (S.-W.) half of the sanctuary.

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The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

The Roof. — No traces whatever of the roof have been preserved, but it obviously must have been a flat wooden one with a fine cornice, as rows of vertical battens intended for the attachment of the latter may be seen at the summit of the curtain wall. As for its decoration there can be little doubt that it was coffered, as we have a whole series of such ceilings, commencing in 1211 and ending in 1352, as under [1] :

(1) Mausoleum of Imâm ash-Shâfʿey [2]........ 608 (1211).
(2) Madrasa of Sultan Ṣâliḥ [3]............. 639-641 (1242-1244).
(3) Mausoleum of Sultan Qalâûn............ 683-684 (1284-1285).
(4) Mosque of an-Nâṣir Muḥammad......... 718-735 (1318-1335).
(5) Palace of the Emîr Beshtâk [4]....... 738 or 740 (1337 or 1339).
(6) Palace of the Emîr Ṭâz................ 753 (1352).

With the exception of what remains of the ceiling of the Mosque of Ibn Ṭûlûn, these are the earliest examples that have been preserved in Egypt. As they are all composed of hexagonal coffers, with saucerlike centres, brilliantly painted and gilded, it is quite safe to assume that the ceiling of the Mosque of Bibars, which in point of date comes between the second and third, was of the same type.

Ornament of Interior of Mosque. — This has been preserved in two places only, (*a*) on the rear face of the main entrance, high up (Plate XXIV), already mentioned; and (*b*) in the eastern corner of the sanctuary, from the maqṣûra to the take-off of the third arcade (counting from the corner) on the north-eastern wall. Here each window (11 in all) is framed by a broad band of more or less undecorated Kufic without floral ornaments, which runs up one side and down the other, continues along horizontally and then rises again to run round the next window, the base of each being thus missed (Plate XXVI). Below the horizontal part of this band, and immediately under each window-sill is a continuous band of arabesque, c. 60 cm. in width, the lower edge of

[1] For dates see my *Brief Chronology, loc. cit.*

[2] Over a deep window recess, 2 m. × 2 m. 80, on the north side.

[3] Roof of passage-way under the minaret.

[4] The ceiling is illustrated in Mrs. Devonshire's *Rambles in Cairo,* second plate facing p. 92.

which is bordered by a narrow band of simple ornament, somewhat resembling that which runs along the outer edge of the band of Kufic. Where this decoration has perished it can be seen that the windows are covered by pointed arches of red brick. In most windows we observe that seven or eight pieces of timber have been built in, some in the arch itself, some in the sides of the window; they all run right through, flush with the surface from one side to the other.

ARCHITECTURAL EVOLUTION OF THE MOSQUE.

The Exterior. — In its exterior elevation, this mosque is clearly related to that of al-Ḥâkim, which it resembles in its corner towers, its projecting monumental gate-ways, and the stepped crenellations which crown its walls. The first of these features has undergone diminution and is destined to be omitted henceforth, but the second exhibits further development, the main entrance having a greater salience, three panels on its flanks instead of two, and a finely decorated entrance arch. The entrances in the centre of each side are no new feature; there are unmistakeable proofs of their presence in the Mosque of al-Ḥâkim — but their treatment as monumental gate-ways is novel. At the same time the large number of entrances which pierce the outer walls of the mosques of Sâmarrâ, Abû Dilif, Ibn Ṭûlûn and, to a lesser extent, in the case of the Mosque of al-Ḥâkim are here omitted. Although we have examples of gate-ways covered by domes on spherical-triangle pendentives in the Bâb al-Futûḥ and the Bâb Zuweyla, and by a cross-vault in the Bâb an-Naṣr, this is the first instance of their application to a mosque in Egypt; Saladin had given a cross-vaulted entrance-bay with a plain frontal arch to his Khânqâ at Jerusalem (Plate XXVII A)[1], but without the exquisite detail which distinguishes those of the Ẓâhirîya.

[1] For an admirable account of this building, see van Berchem, *C. I. A., Jérusalem,* I, pp. 87-90. I am aware that Mujîr ad-Dîn (Sauvaire's transl., p. 169, n. 1, and van Berchem, *op. cit.,* p. 90) says that the Sheykh Burhân ad-Dîn, who was appointed Superior of this Khânqâ in 797 (1394-1395) and died 839 (1435-1436), constructed the minaret, *the great portal,* the vestibule, etc. As regards the great portal I am convinced that a restoration must be meant, for I am unable to believe that it can date from that period. We have a similar one in the Ribâṭ

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The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

Cushion Voussoirs of Main Entrance. — These present a curious problem. The earliest example of this feature, often regarded as Romanesque, occurs on the Bâb al-Futûḥ at Cairo, built, according to an inscription alongside, in 480 (1087)[1], that is to say no less than ten years before the first Crusade left Europe! Crusading influence is therefore excluded. Moreover the fortifications of which this gate-way forms part are known to have been built by three Christian architects from Edessa (Urfa), Armenian refugees who had fled before the advance of the Seljuqs under Malik Shâh, who captured Urfa in 1086. The next four examples in point of date occur in Syria and Asia Minor; this feature does not occur again in Egypt for nearly two centuries and then at a time when Syrian influence was strong. Under these circumstances I am tempted to believe that the cushion voussoirs of the Bâb al-Futûḥ and those of the Church of the Holy Sepulchre (the earliest existing Syrian example) are both derived from a Syrian prototype. The fact that no examples are found in Syria, earlier in date than the Bâb al-Futûḥ, loses much of its significance in view of the great gap of nearly three centuries in the series of Syrian monuments, a gap which starts at the end of the VIIIth century and continues until the end of the XIth.

The four Syrian examples referred to are (1) the Church of S. Anne at Jerusalem probably built about 1130[2], (2) the Church of the Holy Sepulchre, main entrance and western entrance[3], probably completed 1168[4],

al-Manṣûrî at Hebron, built by Qalâûn in 679 (1280-1281) (Mujîr ad-Dîn, p. 426; Sauvaire's transl., p. 223) and in his Ribâṭ at Jerusalem, built two years later (*ibid.*, p. 394, transl. p. 157). All three bear a striking resemblance to each other, and the mouldings are identical. After the end of the thirteenth century the stalactite portal arrived from Northern Syria (via Egypt, however), and no more cross-vaulted entrance bays with plain frontal arches are met with.

[1] Van Berchem, *Notes*, I, *loc. cit.*, pp. 49-53 and his *C.I.A.*, I, p. 62.

[2] After Judith daughter of Baldwin I, (1118-1131), had taken the veil there. See de Vogüé, *Les Églises de la Terre Sainte*, pp. 242-243; and G. Jeffery, *The Holy Sepulchre*, pp. 160-161. Rivoira, on architectural grounds, concurs in this date. See his *Lombardic Architecture*, II, pp. 18-19. In any case it must have been built before 1192 as Saladin turned it into a madrasa in that year, which fact is recorded by an inscription over the lintel of the door-way. De Vogüé, *op. cit.*, p. 214, and Mauss, *La Piscine de Béthesda*, p. 23.

[3] Illustrated in de Vogüé *op. cit.*, p. 209; and Vincent and Abel, *Jérusalem*, II, pl. XXI.

[4] It must have been after 1125, since the description of the Russian Abbot Daniel, whose travels are believed to date from that year,

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The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

(3) the Baptistery of the Church at Jebeil, first half of xii[th] century [1], and (4) the door-way of the Masjid of ʿAla ad-Dìn's turbeh at Konia, dated 616 (1219-1220) by an inscription over the entrance [2]. The next Syrian examples in chronological order are (5) the portico of the Shrine of Abû Hureira at Yebna 673 (1274) [3], (6) the minaret of the White Mosque at Ramla, 718 (1318) [4], (7) the eastern triple archway (Muwâzîn Bâb al-Huta) on the north side of the Ṣakhra platform at Jerusalem, with an inscription in the name of an-Nâṣir Muḥammad (693-741 = 1294-1340), and (8) the Khaldia Library. Undated examples are : (9) door-way of a tower at Suffurîya [5], (10) minaret of the Jâmiʿ al-Khâdra at Nablus, windows of top storey; (11) door-way inserted by the Muhammadans in the east end of the Crusaders' church at Gaza; (12) door-way of a little Mosque at Khirbet Dayr al-Kussis [6]; and two of the xvi[th] century; (13) the Zion Gate and (14) S. Stephen's Gate at Jerusalem [7].

The first four examples in Egypt after the Bâb al-Futûḥ are : (1) the main entrance of the mosque we are now discussing; (2) Minaret of Sultan Qalâûn's mausoleum, 683-684 (1284-1285), window niches of top storey but one; (3) minaret of the Madrasa of Salâr and Sangar al-Gawlî, window

shows that the Crusaders had not yet commenced their work. G. Jeffery, *op. cit.*, p. 18 ff. On the other hand de Vogüé has shown (*op. cit.*, pp. 212-220) that the main work (this would include our façade) was finished by 1149, and the internal decoration by 1167-1168.

[1] De Vogüé, *op. cit.*, pp. 374-375 and plate XXVIII, and van Berchem and Fatio, *Voyage en Syrie*, I, pp. 110-112 and plates IV-V.

[2] Cl. Huart, *Épigraphie arabe d'Asie Mineure, Revue Sémitique*, 1895, p. 75; Loytved, *Konia*, p. 27 f.; Sarre, *Denkmäler persischer Baukunst*, pp. 122-123 and Abb. 170; van Berchem, *Inschriften aus Syrien, Mesopotamien und Kleinasien*, p. 135; and Miss Lamb, *Notes on Seljouk Buildings at Konia, Annual of the Brit. Sch. at Athens*, XXI, pp. 44-45, and plate VIII, 2 and 3. In view of my suggestion that this motive is of Syrian origin, it is important to note that ʿAla ad-Dìn's architect, Muḥammad ibn Khaulan, came from Damascus.

[3] *Survey of Western Palestine, Memoirs*, II, pp. 442-443, and Clermont-Ganneau, *Archæological Researches in Palestine*, pp. 176-181. The latter suggests that it was built of materials taken from a church of the Crusaders.

[4] Van Berchem, *Inscriptions arabes de Syrie, M. I. É.*, III, pp. 473-480.

[5] *Survey of Western Palestine, Memoirs*, I, pp. 335-338, with figure.

[6] *Ibid.*, II, pp. 331-332.

[7] In Bourgoin's *Précis de l'Art arabe*, Part I, plate 42, is a drawing of a door-way with cushion voussoirs; it is said to be from the Mosque of Toba, Damascus. If this is the Jâmiʿ at-Tauba, it gives us another dated example, as this mosque was built in 632 (1234-1235). See Sobernheim's note in *Der Islam*, Bd. XII, p. 2.

niches; and (4) Khânqâ of Sultan Bibars al-Gashankîr, 706-709 (1306-1309); entrance. All these monuments were built at a time when Syrian influence was strong. The series may be continued as follows : (5) Mausoleum of ʿAly Badr al-Qarâfì, c. 700-710 (1300-1310), entrance; (6) Mausoleum of the Emîr Anas, 783-784 (1382), arch of ruined lîwân; and (7) Maristân of Sultan al-Muayyad, 821-823 (1418-1420), great arch of subway.

The Interior. — In designing the interior arcades, the plan of the Mosque of al-Ḥâkim has evidently been taken as a basis, with the addition, however, of an extra arcade to the lîwân qiblî, but the transepts leading to the ṣaḥn from each entrance are a feature not found in that mosque, although it appears possible that wider arches were originally contemplated opposite the two side entrances. But whence comes the really novel feature? — the great maqṣûra crowned by a wooden dome and occupying nine bays of the sanctuary [1], a feature which took root in Egypt and appears in the next two congregational mosques built in Cairo, that of an-Nâṣir Muḥammad in the Citadel and the Mosque of his Cup-Bearer al-Mâridânî.

The Ortuqide Mosque at Mayâfâriqîn. — To find anything similar of earlier date we must go to Mayâfâriqîn, where a mosque with just such a maqṣûra dominating the sanctuary, still exists [2]. The plan (Fig. 10) shows a sanctuary four aisles deep, dominated by a great square maqṣûra, composed of the back wall and three triple-arched façades, the central arch of each being wider than the side ones. This fact has clearly determined the varying width of the aisles of the wings, which are of later date. The central domed chamber and the aisles which surrounded it on three sides are of the same period; according to an inscription which runs round the cornice just below the springing of the dome (now fallen), the builder was the Ortuqide Alpi,

[1] Diez has emphasised the unusual type of this sanctuary : «Dieser Transept mit der drei Schiffsbreiten überspannenden Kuppel ist allerdings eine neue Erscheinung und wohl zu unterscheiden von der bisher betrachteten. Hier macht sich der Enfluss eines neuen moscheetypus geltend, von dem unter die Rede sein wird. *Die Kunst der islamischen Völker,* p. 58.

[2] Although mentioned as long ago as 1865 by Taylor (*J. R. G. S.,* XXXV, p. 25), we are indebted to Miss Bell for the only plan and photographs of it which have been published. See *Ukhaiḍir*, pp. 159-160 and Plates 84 (3), 92 and 93 (2).

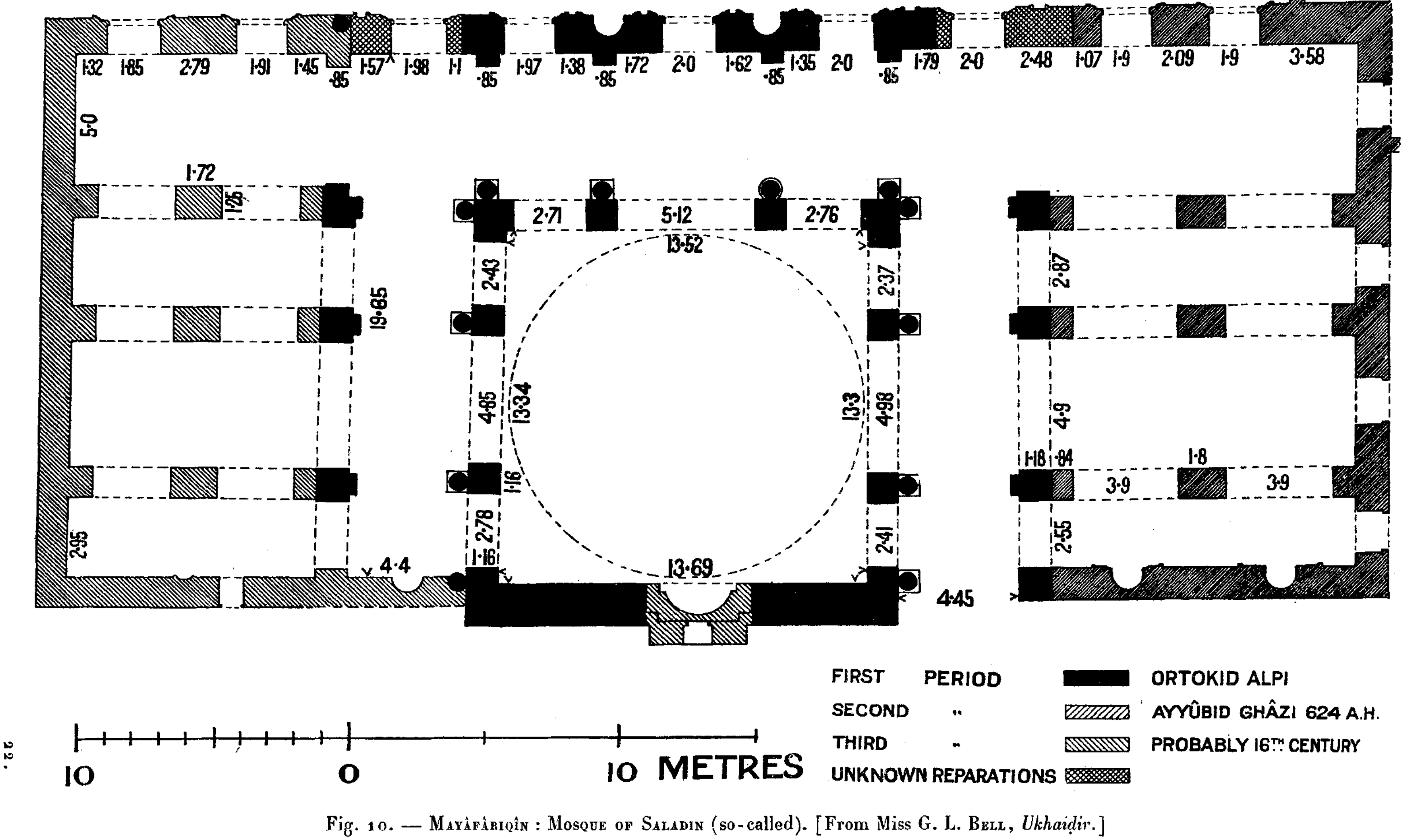


Fig. 10. — Mayâfâriqîn : Mosque of Saladin (so-called). [From Miss G. L. Bell, *Ukhaiḍir*.]

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The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

547-572 (1152-1176)[1]. The east wing was added by the Ayyûbide Ghâzi in 624 (1227)[2]. Miss Bell found the ṣaḥn a complete ruin and full of débris, without any trace of a minaret. The west wing as it stands at present is late, but, as its plan corresponds exactly with that of the other wing, I presume that it is merely a reconstruction of part of Ghâzi's work.

Now as to the nature and purpose of the original building, it is well to be cautious in expressing an opinion. The text of the inscription has not been published, and therefore one cannot be certain as to the term used to designate the original edifice, but in any case it can scarcely have been intended for a congregational mosque, until it was extended in 624 H. A great domed chamber of this sort may well have been a mausoleum, the ambulatory suggests a mashhad, recalling as it does the Mashhad of Yaḥyâ ash-Shabîh (c. 1150 A.D.) at Cairo, except that the ambulatory in the latter passes between the miḥrâb and the dome-chamber instead of between the latter and the entrance.

But this scarcely concerns us here; what does concern us is that the additions of the Ayyûbide Ghâzi in 624 (1227) produced a mosque with a lîwân qiblî dominated by a great domed maqṣûra occupying nine bays, a feature which is the most striking innovation in the Mosque of Bibars. To suggest a relationship between the two on this evidence alone would be following a pernicious practice which, I am sorry to say, is only too common at the present day. Before doing so we must answer the question : can any connection be demonstrated between Cairo and Mayâfâriqîn at this time?

Mayâfâriqîn in the xiiith Century. — The troubled history of the region between Diyarbekr, Mardîn, Ḥiṣn Kaifa and Mayâfâriqîn in the xiith and xiiith centuries, when towns, as Ibn Shaddâd says[3], «passed from one ruler to another as though they were pledges or chessmen», has only recently become well known, thanks chiefly to the researches of van Berchem[4].

[1] Miss Bell, *op. cit.*, p. 159. For a chronology of this dynasty, see van Berchem, *Arabische Inschriften aus Armenien und Diyarbekr* (*Abh. der Kgl. Gesell. der Wissenschaften zu Göttingen, phil.-hist. Klasse*, neue Folge, IX, 3), p. 10 of the Sonderabdruck.

[2] *Ibid.*, p. 159. This inscription was recorded by Taylor, *loc. cit.*, p. 25, but apparently was not noticed by Lehmann-Haupt, who collected the inscriptions published by van Berchem in the above cited memoir.

[3] Quoted by Amedroz, *J. R. A. S.*, 1902, p. 798, n.

[4] *Arabische Inschriften aus Armenien und Di-*

Conquered by ʿAḍud ad-Daula and added to the Hamdânide kingdom, Mayâfâriqîn, on his death in 372 (982-983), fell into the power of a Kurd named Bâdh, whose two nephews, at the death of their uncle, founded the dynasty of the Merwânides, and made it their capital [1]. Taken from this Kurdish dynasty by Ibn Jahîr in 478 (1085-1086) [2], it passed under the suzerainty of the Seljûqs, until it once more became independent under the Ortûqides in 515 (1121). Conquered by Saladin in 581 (1185) [3], it was given by him in vassalage to his nephew Taqi ad-Dîn ʿUmar.

Within a few years of Saladin's death (589 H. = 1193) the Ayyûbide Princes acknowledged al-ʿÂdil as their Suzerain, from which it follows that the various provinces which had formed Saladin's empire remained in close touch with each other. Al-ʿÂdil struck coins at Cairo, 597-615 (1200-1218); Alexandria, 596-614; Damascus, 599-615; Ḥarrân, 591; Edessa (Urfa), 601 and 604; and, be it specially noted, Mayâfâriqîn, 591 (1195); and his name appears as suzerain on the coinage of aẓ-Ẓâhir of Aleppo, 599, al-ʿAzîz of Aleppo, 614, and al-Ashraf of Diyarbekr, 612 [4]. On al-ʿÂdil's death Mayâfâriqîn continued under a branch of the Ayyûbide family. As for the neighbouring city of Diyarbekr, this passed under the direct rule of Egypt in 629 (1231) in which year Sultan al-Kâmil left Cairo with an army, took the town from the unworthy Maudûd and handed it over to his son aṣ-Ṣâliḥ Negm ad-Dîn Ayyûb. The latter held it until he became Sultan of Egypt in 637 [5], but not before he had left a souvenir of his governorship in the form of an inscription on a half-round tower on the north front of the fortifications [6].

So intimate was the connection between this area (Diyarbekr, Mardîn, Ḥiṣn-Kaifa, Mayâfâriqîn) and the Egyptian Court that even eighty years later

yarbekr, loc. cit., and his *Matériaux pour l'épigraphie et l'histoire musulmanes du Diyar-Bekr,* in van Berchem and Strzygowski, *Amida,* pp. 1-128.

(1) Amedroz, *Three Arabic MSS. on the History of the City of Mayyâfâriqîn, J. R. A. S.,* 1902, pp. 797-798; and van Berchem, in *Amida,* pp. 22-23.

(2) Van Berchem, *loc. cit.,* p. 37. Ibn Jahîr's life is given by Ibn Khallikân, de Slane's transl., III, p. 280.

(3) Behâ ad-Dîn, in the *Palestine Pilgrims' Text Society,* vol. XIII, p. 101. He gives the date as 29 Gumâda I, 581 (28th August 1185). See also Lane-Poole, *Saladin,* pp. 192-193.

(4) Lane-Poole, *History,* p. 215, n. 2.

(5) D'Ohsson, *Histoire des Mongols,* III, p. 72; and Howorth, *History of the Mongols,* III, p. 21.

(6) Van Berchem and Strzygowski, *Amida,* pp. 105-106.

it was not forgotten. I offer the following remarkable confirmation from Shihâb ad-Dîn [1].

« The master of Ḥiṣn-Kaifa » (less than 40 miles from Diyarbekr) « is a descendant of the Ayyûbide Kings, to whom the Kings of Egypt testify respect, in remembrance of the former relations which they kept up with them, and because this mutual affection has persisted to our day. [The *Taʿrîf* was written c. 741 = 1340-1341.] One of them, Malik Ṣâliḥ, has wished quite recently to go to the Court at Cairo, ... »

Thus we can well believe that many men, between the middle of the XII^th^ and XIII^th^ centuries, were attracted from this area by the renowned wealth of Cairo to go there and practise their crafts. But there was a still more imperative reason, the Mongol storm which, like a forest fire, drove crowds of refugees before it.

Cairo the Refuge of Islam from the Mongols. — In 1218, before the coming of the Mongols, Samarkand, Bukhâra, and the greater part of Persia with the exception of Fars, were under the rule of Muḥammad Khwârizm Shâh. The Mongols conquered the whole of his kingdom [2] and he died, fleeing from their generals Sabutai and Chepé Noyan, on an island in the Caspian in 1221; he left three sons, Jalâl ad-Dîn, a fugitive in India, Rukn ad-Dîn, killed later by the Mongols at the fortress of Sutun-Avend, and Ghîâth ad-Dîn, who had taken refuge in Mazânderân [3].

The Mongols overran Persia, pillaging and destroying its cities and massacring its inhabitants, till 1223, when the tide of their invasion ebbed and left the country ruined. From the banks of the Oxus to the heart of Persia every town of any importance had been reduced to ruins. In the words of Juwayni who escaped from the sack of Bukhâra, where 30,000 were massacred, « They came, they uprooted, they burned, they slew, they carried off,

[1] *Taʿrîf,* Cairo ed., p. 33; quoted by van Berchem, *op. cit.,* p. 114.

[2] For this campaign see d'Ohsson, *Histoire des Mongols,* I, pp. 216-309; Sir Henry Howorth, *History of the Mongols,* I, pp. 73-93; Skrine and Ross, *Heart of Asia,* pp. 158-159; Professor E. G. Browne, *Literary History of Persia,* II, pp. 426-449, and Sir Percy Sykes, *History of Persia,* II, pp. 149-160.

[3] D'Ohsson, *op. cit.,* III, p. 2; and Howorth, *op. cit.,* III, pp. 1-2; also as-Suyûṭî, Jarrett's transl., pp. 494-495.

they departed[1]". In 1224 a fresh raid into Persia was made, Kûm, Ray and Kashân were destroyed, and Irâq al-Ajam and Azerbaijân were once more overrun[2]. On the retreat of the Mongols Ghîâth ad-Dîn recovered Persia, but was displaced by his brother Jalâl ad-Dîn who had returned from India[3]. Persia now enjoyed a few years of tranquillity before the bursting of another storm.

In 1229, at the great Quriltâi or Diet held on the banks of the Kerulon, at which Ogotâi was elected as the successor of Jangîs Khân, it was decided to send two armies against the West, one against Southern Russia, the other to root out and utterly destroy the family of Muḥammad Khwârizm Shâh[4], and by 1231 the greater part of Persia was once more under the heel of the Mongols[5].

They first made their appearance in the neighbourhood of Mayâfâriqin in 1231 in pursuing Jalâl ad-Dîn, and, on his death in that year, the districts of Mardîn, Nisibin and Sinjar were ravaged[6], after which they appear to have been left alone for another ten years. In 1241 Shihâb ad-Dîn, who had held Mayâfâriqîn since 617 (1220), received a summons from the Khaqân[7] to raze its walls and offer his submission, in return for the title of Silaḥdâr[8]. In 1243 the Mongols advanced into Asia Minor, and in 1244 passed through Mayâfâriqîn, Mardîn and Urfa on a raid in the direction of Aleppo[9]. In 1249-1250 we read of a raid on the district of Baghdâd[10]. In 1252-1253 devastating raids occurred in N. Mesopotamia as far as Mayâfâriqîn, Diyarbekr, Seruj, Ras al-ʿAin, and Malaṭîya[11].

[1] *Ta'rîkh-i-Jahân-gusha,* quoted by Browne, *op. cit.,* II, p. 12.

[2] D'Ohsson, *op. cit.,* I, pp. 349-351; Howorth, *op. cit.,* I, p. 97, and Sykes, *op. cit.,* II, p. 159.

[3] For his brilliant campaign, see d'Ohsson, *op. cit.,* III, pp. 5-33; Howorth, *op. cit.,* I, pp. 126-129 and III, pp. 2-10; Müller, *Geschichte des Islams,* pp. 213-225; Browne, *op. cit.,* II, pp. 449-450; and Sykes, *op. cit.,* II, pp. 163-167.

[4] D'Ohsson, *op. cit.,* II, p. 15; Howorth, *op. cit.,* III, p. 14; and Sykes, *op. cit.,* II, p. 163.

[5] D'Ohsson, III, p. 47 ff.; and Howorth, III, pp. 14-18.

[6] D'Ohsson, III, p. 61 and 67-68; and Howorth, III, pp. 18 and 20.

[7] On this title, see Yule-Cordier, *Marco Polo,* Vol. I, p. 10.

[8] D'Ohsson, III, pp. 85-86, quoting Maqrîzî, *Ta'rîkh;* see also Howorth, III, p. 45.

[9] Howorth, III, p. 48.

[10] D'Ohsson, III, p. 91; and Howorth, III, p. 60.

[11] Maqrîzî, in Quatremère, *Sultans Mamlouks,* I a, p. 37; d'Ohsson, III, pp. 91-92; and Howorth, III, p. 67.

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The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

At the great Quriltâi, held at the accession of Mangu Khân in 1251, various expeditions were decided upon. One, entrusted to Hûlâgû Khân, had for its object the extermination of the Assassins, with their Chief the Old Man of the Mountain, who ruled from Alamût in N. Persia, the destruction of the Khalifate, and the conquest of the whole of Western Asia[1]. Hûlâgû crossed the Oxus in 1253 and by 1257 had overwhelmed all the Ismaelite fortresses[2]. He then marched to Hamadân and despatched a summons to the Khalif to raze the walls of Baghdâd and submit. An unsatisfactory reply having been received, the siege commenced and culminated in the fall of the city in February 1258. This, as was usual with the Mongols, was followed by the execution of the Khalif, the massacre of the greater part of the population, the sack of the city, which lasted seven days, and a great conflagration, which did immense damage[3].

« The loss (says Prof. E. G. Browne) suffered by Muslim learning, which never again reached its former level, defies description and almost surpasses imagination : not only were thousands of priceless books utterly annihilated, but, owing to the number of men of learning who perished or barely escaped with their lives, the very tradition of accurate scholarship and original research, so conspicuous in Arabic literature before this period, was almost destroyed[4]. »

Hûlâgû resumed his onward march on the 12th of September 1259 and entered the province of Diyarbekr; Nisibin, Ḥarrân, Urfa, Seruj, and al-Bîra (Birejik) having passed into his possession, he advanced on Aleppo. The fear of the Mongols had caused many of the inhabitants to emigrate to Damascus, and a great many families of Damascus in their turn took refuge in Egypt[5]. Aleppo was besieged, and fell on the 25th of January 1260, after having been battered for seven days by twenty catapults, and the almost inevitable

[1] D'Ohsson, III, pp. 134-135; Howorth, I, pp. 193-196 and III, p. 90; and Sykes, II, p. 171.

[2] D'Ohsson, III, pp. 137-203; Howorth, I, pp. 193-196, and III, pp. 90-106; Browne, *op. cit.*, II, pp. 453-460; and Sykes, II, pp. 171-173.

[3] As-Suyûṭî, Jarrett's transl., pp. 497-499; d'Ohsson, III, pp. 204-254; Howorth, I, pp. 196-201 and III, pp. 113-131; Browne, *op. cit.*, pp. 460-466; and Sykes, II, pp. 173-175.

[4] *Op. cit.*, II, p. 463.

[5] D'Ohsson, III, pp. 316-317, quoting Maqrîzî.

massacre ensued [1]. Mayâfâriqîn, which Hûlâgû had masked by an army under his son Yashmut, only fell some months later, after one of the most gallant defences ever put up against the Mongols [2].

Hûlâgû, having heard of the death of Mangû Khân, entrusted the command of the army to Ketbughâ and recrossed the Euphrates, in order to press his claim at the election of his successor. All Syria, as far south as Gaza, was soon occupied by the Mongols, thanks to the cowardice of Malik Ashraf Mûsa of Ḥomṣ, Malik Manṣûr of Ḥamâ and al-Malik an-Nâṣir Yûsuf of Damascus [3] and a threatening message was sent to Quṭuz to surrender Egypt [4]. His vigorous action, the advance of the Egyptian army into Palestine and the victory obtained over the Mongols at ʿAyn Jalût on September 3rd, 1260, are well known, but the importance of this event cannot be overrated. The legend of Mongol invincibility was broken, and Syria was soon entirely free from this human pestilence [5]. Their reign of terror, however, had hung over the civilized world like a nightmare for forty years. «In its suddenness, its devastating destruction, its appalling ferocity, its passionless and purposeless cruelty, its irresistible though short-lived violence, this outburst of savage nomads, hitherto hardly known by name even to their neighbours, resembles rather some brute cataclysm of the blind forces of nature than a phenomenon of human history [6].» Professor E. G. Browne, who refers to the Mongol invasions as «one of the most dreadful calamities which ever befel the human race [7]», continues. «It is almost impossible to exaggerate either the historical importance or the horror of this great irruption of barbarians out of Mongolia, Turkistán and Transoxiana in the first half of the thirteenth century. Amongst its results were

[1] Maqrîzî, in Quatremère, *Sultans Mamlouks*, I A, pp. 87 and 90-91; d'Ohsson, III, pp. 316-321; and Howorth, I, p. 209 and III, pp. 143-148.

[2] D'Ohsson, III, pp. 354-357; Howorth, III, pp. 144-145 and 156-159; Amedroz, *op. cit., J. R. A. S.*, 1902, pp. 806-808.

[3] Maqrîzî, in Quatremère, *op. cit.*, I A, p. 99. An-Nâṣir had already shown himself a coward in refusing to assent to the proposal of al-Kâmil of Mayâfâriqîn that they should join forces and go to the relief of Baghdâd. See Amedroz, *op. cit., J. R. A. S.*, 1902, pp. 805-806.

[4] The text of this message is given by Maqrîzî; see Quatremère, *op. cit.*, I A, pp. 101-102; and Howorth, III, pp. 165-166.

[5] As-Suyûṭî, Jarrett's transl., pp. 500-501; d'Ohsson, III, pp. 334-342, and Howorth, III, pp. 167-170.

[6] Browne, *op. cit.*, II, p. 427.

[7] ***A History of Persian Literature under Tartar Dominion***, p. 4.

the destruction of the Arabian Caliphate and disruption of the Muhammadan Empire, the creation of the modern political divisions of Western Asia, the driving into Asia Minor and subsequently into Europe of the Ottoman Turks, the stunting and barbarizing of Russia, and indirectly the Renaissance. As regards the terror universally inspired by the atrocious deeds of the Tartars, d'Ohsson in his admirable *Histoire des Mongols* observes that we should be tempted to charge the Oriental historians with exaggeration, were it not that their statements are entirely confirmed by the independent testimony of Western historians as to the precisely similar proceedings of the Tartars in South-eastern Europe, where they ravaged not only Russia, Poland and Hungary, but penetrated to Silesia, Moravia and Dalmatia[1]. »

Recently, however, an historian has appeared[2] as an admirer of Jangīs Khân. Amongst other strange views, he actually maintains that he « détruisit uniquement les éternels ennemis des races civilisées et supprima seulement les obstacles qui s'élevaient entre elles » (III, p. 30), which sounds strange after reading *in the same volume* (p. 23) that « la tourmente mongole anéantissait l'œuvre de six siècles de l'Islam. Comme un énorme cataclysme cosmique, elle bouleversait jusqu'en ses entrailles ce vieux sol de l'Iran Oriental qui avait porté jadis la brillante civilisation persane des Samanides, des Ghaznevides et des Seldjoucides, cette terre par excellence du classisisme [*sic*] oriental... », and at the next page : « Ces scènes de boucherie, méthodiquement conçues, exécutées de sang-froid, se déroulaient dans un ordre impeccable, comme la guerre dont elles étaient le dénouement. Les troupeaux humains étaient conduits à l'abattoir ainsi qu'à une revue, et répartis, suivant les indications de scribes affairés, entre les divers régiments chargés de leur exécution. Après un an de ce système, l'Iran Oriental était à peu près vide d'hommes... » But that this historian's outlook on life can scarcely be normal is shown by the fact that he cites the following incident as an example of the sweet reasonableness of Jangîs : After the conquest of the part of China north of the Hoang Ho in 1225, a Mongol General remarked to Jangîs that his new Chinese subjects were of no use, as they were not apt pupils in the art of war, and that it would be more to his advantage to exterminate them and use

[1] *Ibid.*, pp. 5-6. — [2] René Grousset, *Histoire de l'Asie.*

their lands as grazing grounds for the Mongol cavalry. Jangîs fell in with this idea and was only prevented from ordering a systematic massacre of about 10 million people, by the famous Yeliu Tashi who pointed out that it would be more profitable to exact a substantial tribute from them (p. 33).

Grousset completely misses the point. Other conquerors have been brutal and ruthless, but their object has been conquest followed by administration; whereas the Mongols had no such intentions, at least for the first fifteen years after their appearance; as Sir Charles Oman has well expressed it, they «represented not mere conquest but blind and wilful destruction : they left a desert behind them, and killed for killing's sake [1]».

Jangîs Khân's outlook on life may be realised from the following saying of his : The greatest joy is to conquer one's enemies, to pursue them, to seize their property, to see their families in tears, to ride their horses, and to possess their daughters and wives [2].

I have already compared the Mongol storm to a forest fire [3] driving crowds of refugees before it [4]. That this is not merely an historical deduction is evident from the specific statement of Maqrîzî, who says : «When the East and Irâq (Mesopotamia) were destroyed by the invasion of the Tatars, from the appearance of Jangîs Khân shortly after 610 [1213-1214] until the murder of the Khalif al-Mustaʿṣim at Baghdâd in Ṣafar 656 [February-March 1258], numbers of Orientals came to Egypt and built themselves homes on the banks of the Khalîg and round the Birkat al-Fîl [5]». During the first part of the

[1] *Art of War* (1924 edition), II, p. 327.

[2] *Jami at-Tawarikh,* quoted by Sykes, *op. cit.*, p. II, p. 161.

[3] Ibn al-Athîr calls it a «catastrophe, whereof the sparks flew far and wide, and the hurt was universal». His opinion of the Mongols is given at length by Browne, *Literary History of Persia,* II, pp. 427-431.

[4] Three distinguished refugees may be mentioned : (1) Yâqût, the famous geographer (died in 1229) was compiling his great Geographical Dictionary in the rich libraries of Merv. c. 1220 and just managed to escape the Mongols by fleeing to Moṣul (Browne, *Literary History,* II, p. 431). (2) The historian Abû l-Faraj, better known as Barhebræus, in 1243 was compelled for the same reason to leave Malâṭīya, his birthplace, and seek refuge at Antioch and subsequently in Tripoli (*ibid.,* pp. 468-469). (3) ʿOmar ibn Aḥmad, who was Chief Qâḍî of Aleppo, whence he was driven by the invasion of the Mongols. He was the author of a biographical dictionary and died at Cairo in 660 (1261-1262). See de Sacy's art. *Kemel-Eddin,* in Michaud's *Biographie universelle,* t. XXI, p. 508; and Freytag, *Selecta ex Historia Halebi,* pp. xxxvi-xliv.

[5] *Khiṭaṭ,* I, pp. 364-365 (Casanova's transl., IV, p. 50).

period named by Maqrîzî it is obvious that there were only three places of refuge, Syria, the Seljuq kingdom of Rûm[1], and Egypt, and at the end of the period, one only — Egypt — [2] which must therefore have received the majority, since it would ultimately receive all those who had taken temporary refuge in Syria. Hence the great importance of these events for our subject, and the justification of the space here devoted to them. Hence also the constant signs of N. Mesopotamian and Syrian influence (e.g. the stalactite entrance, the ornament in the west gateway, the arcuated lintels, the cushion voussoirs, etc.) which are observed in the xiii[th] century architecture of Egypt, and the possibility that the plan of the Mosque of aẓ-Ẓâhir was directly inspired by a mosque plan which had been created, quite fortuitously, at Mayâfâriqîn in 1223, by the addition of wings to a building which was certainly never intended for a congregational mosque.

Migration of craftsmen as a result of invasion was no novelty in Islam. The three Christian (i.e. Armenian) architects from Edessa (Urfa) who commenced the Fâṭimide fortifications of Cairo in 480 (1087) had probably fled from the former town owing to its capture by the Seljuqs in the previous year. The wars of the Khwârizm Shâh provide another instance. An inscription in the Mosque of Aḥmad Shâh at Divrigi states that it was built in 626 (1228-1229) by an architect, named Khurremshâh, from Khelat or Akhlat[3], a town which was besieged by the Khwârizm Shâh Jalâl ad-Dîn in 623 and

[1] This is possibly the explanation of the fact that the architect of the Syrtchali Madrasa at Konia was a Persian from Ṭûs (Sarre, *Reise in Kleinasien*, p. 54, and his *Denkmäler persischer Baukunst*, p. 127). Migeon has already made this suggestion, pointing out that the towns of Khurasân received the first shock of the Mongol invasion (*Manuel d'Art musulman*, II, pp. 293-294). Herzfeld in a recent memoir (*Mshattâ, Ḥîra und Bâdiya, loc. cit.*, pp. 144-145), has analysed the Seljuq architecture of Asia Minor as follows : «In Seljuq architecture Syrian influence struggles with Persian for the mastery, and it leads to a strange division as if by agreement; the marble exterior of the buildings belongs to Syria, sometimes crossed, especially in an Armenian district such as Sivas and Divrigi, with distinct Armenian influence, but the interior, decorated with fayence mosaic, belongs to Irân. Thus did the master-craftsmen carrying out the work divide themselves : Persians within, Syrians without.» Is not this dual influence completely in accord with the history of the period?

[2] For Syrians the route to Asia Minor was, at the end of this period, more or less blocked by the Mongol conquests which drove a wedge between the two.

[3] Van Berchem and Halil Edhem, *C.I.A., Asie Mineure*, I, p. 70 ff.

again in 626-627 [1]. It is therefore probable that Khurremshâh was a refugee also.

Similar migrations of craftsmen took place as a result of the Mongol storm. The minbar of the mosque at Divrigi mentioned above was made in 638 (1240-1241) by a craftsman from Tiflis [2], who had probably fled from that town to avoid its siege and capture by the Mongols, an event which took place in 1241 [3].

This migration of craftsmen can be demonstrated in another field — that of inlaid copper ware, of which Moṣul appears to have been a most important centre in the first half of the XIIIth century. Moṣul was taken by the Mongols in 1255, and this art appears to have ceased in N. Mesopotamia about that time, only to re-appear in Cairo immediately after. This fact, which was grasped with admirable insight by Lane-Poole as long ago as 1888 on somewhat scanty evidence [4], has been more securely established by van Berchem through the examination of a large number of inscription-bearing examples [5]. A number of fundamental documents for this theory may be enumerated :

(1) Ewer, inlaid with silver, from the collection of the Duc de Blacas, now in the British Museum. «Engraved by Shuja, son of Manʿa of Moṣul, Rajab, 629 (April-May, 1232) at Moṣul [6].»

[1] Van Berchem and Halil Edhem, *op. cit.*, p. 80.

[2] *Ibid.*, p. 81.

[3] Van Berchem (*ibid.*, p. 82) suggests that he had become a fugitive when Tiflis was sacked by Jalâl ad-Dîn in 623, but I prefer a date which corresponds more closely with the first evidence for his presence at Divrigi.

[4] *Art of the Saracens in Egypt*, pp. 153-200.

[5] Lavoix, *La galerie orientale du Trocadéro*, in the *Gazette des Beaux-Arts*, 2^{e} période, t. XVIII, pp. 783-786; van Berchem, *Notes d'Archéologie arabe*, III, in the *Journal asiatique*, 10^{e} série, t. III, pp. 8-43. See also Migeon, *Manuel d'art musulman*, pp. 165-219; Kühnel, in the *Meisterwerke muhammedanischer Kunst*, preface to the section on metal work, p. VI; and Migeon, *Documents d'Art, Musée du Louvre, L'Orient musulman*, pp. 19-20.

[6] Reinaud, *Monuments arabes du cabinet du duc de Blacas*, pp. 423-439; Lanci, *Trattato delle simboliche rappresentanze*, II, p. 131; A. de Longpérier, *Revue archéol.*, I, p. 543; and his *Œuvres*, I, p. 354; Lavoix, *loc. cit.*, t. XVIII, p. 783; Lane-Poole, *Art of the Saracens in Egypt*, pp. 170-171; Migeon, *Les cuivres arabes*, *G. B. A.*, 3^{e} période, t. XXII, pp. 472-473 (with illustration); and van Berchem, *Notes d'Archéologie arabe*, III, in the *Journal asiatique*, 10^{e} série, t. III, pp. 29-30. As Migeon and van Berchem have already pointed out, this ewer is of supreme importance, since the inscription expressly says that it was made at Moṣul. In this respect it is, I believe, unique, although five other

(2) Basin from the Goupil Collection, now in the Musée des Arts décoratifs, Paris, bearing the date 650 (1252-1253), and signed by «Dawûd, son of Salama, of Moṣul». On the reverse is an inscription « . . . . . made for the Emîr Badr ad-Dîn Baisârī, Treasurer of Jamâl ad-Dîn Muḥammad[1]».

(3) Ewer, exhibited in the Trocadero, Paris, in 1878. From the collection of the Baroness Delort de Gléon; now in the Louvre. On the neck — «Engraved by Ḥuseyn, son of Muḥammad, of Moṣul, at Damascus the well-guarded, in the year 659 (1261)[2]». Ḥuseyn therefore had come from Moṣul, and later on he and his family appear to have left Damascus, probably in the following year when it was occupied by the Mongols, as we shall presently find his son working in Cairo (see No. 6, below).

(4) Candlestick in the Arab Museum, Cairo, « . . . . . made by Muḥammad, son of Ḥasan of Moṣul, at Cairo, in the year 668 (1269)[3]».

dated pieces are known, made by craftsmen of Moṣul, and almost certainly *at* Moṣul, as the event which caused the migration of craftsmen had not yet taken place :

(1) Basin in the Sarre Collection, with name and titles of Mu'izz ad-Dîn Maḥmûd ibn Sinjar Shah, Atabeg of Jazîra, who began to reign 605 (1208). *Sammlung Sarre*, Teil I, pp. 12-13.

(2) Little box inlaid with silver in the Benachi Collection (Alexandria). Dated «Jumâda II, 617 (August 1220). Inlaid by the son of Ismâ'îl, son of Ouard of Moṣul, pupil of Ibrahim son of Maould of Moṣul» (*Exposition d'art musulman, Alexandrie, 1925*, p. 77).

(3) Box inlaid with silver, made for Badr ad-Dîn Lulu of Moṣul [632-657 = 1233-1259]. In the Henderson Collection, British Museum. Lane-Poole, *op. cit.*, pp. 172-173; Migeon, *Les cuivres arabes, loc. cit.*, t. XXII, p. 473.

(4) Astrolabe : «work of Muḥammad, son of Khutlukh of Moṣul. Year 639 (1241-1242)». In the British Museum. See Lavoix, *loc. cit.*, p. 783; and van Berchem, *loc. cit.*, p. 30.

(5) Chandelier from the Goupil Collection, exhibited at the Musée des Arts décoratifs in 1903. «Work of Dâwûd, son of Salâma, of Moṣul, in the year 646 (1248-1249)». See Lavoix, *loc. cit.*, XVIII, p. 786, and XXXII, p. 298; Migeon, *Les cuivres arabes, loc. cit.*, t. XXIII, pp. 123-124, and van Berchem, *loc. cit.*, p. 25.

[1] Lavoix, *loc. cit.*, XXXII, p. 298; Migeon, *Exposition des arts musulmans*, 1903, pl. 15; van Berchem, *loc. cit.*, pp. 23-24; and Migeon, *Manuel*, p. 186. This well known Emîr, who died in 698 (1298-1299), was frequently in Cairo and Damascus in 650 H. and the following years; van Berchem therefore suggests that the basin was made in one of these two cities.

[2] Lavoix, *loc. cit.*, t. XVIII, p. 786; van Berchem, *Notes*, III, p. 22; Migeon, *Les cuivres arabes, loc. cit.*, XXIII, p. 126; his *Manuel*, p. 192; Kühnel's preface to the *Meisterwerke*, p. vii; and Migeon, *Documents d'Art, Musée du Louvre, L'Orient musulman*, p. 24 and pl. 31.

[3] Migeon, *Les cuivres arabes, loc. cit.*, XXIII, pp. 127-128; Herz, *ibid.*, 1902 (2), p. 57; his *Catalogue*, 2e éd., pp. 182-183 and Fig. 34; and Migeon, *Manuel*, p. 204.

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(5) Perfume burner, described by Migeon as «singulièrement influencé d'art mossoulien», made for the Emîr Baisârî and dated 670 (1271), but unsigned [1].

(6) Ewer from the Goupil Collection, exhibited at the Musée des Arts décoratifs in 1903. «Work of ʿAlî, son of Ḥuseyn of Moṣul. Made at Cairo in 674 (1275-1276) [2].»

(7) Great basin from the Piet-Lataudrie Collection, now in the Louvre. «Engraved by ʿAlî, son of Ḥuseyn of Moṣul, at Cairo, in the year 684 (1285-1286) [3]».

(8) Hexagonal kursi in the Arab Museum, Cairo, « . . . . . made by Muḥammad son of Sunqur, of Baghdâd, in 728 (1327-1328) [4]».

Ornament in Main Entrance-Bay. — The curious treatment of the spandrels of the arched panels to right and left of the main entrance-bay is another Syrian feature of this mosque [5]. This ornament, the presence of which in

[1] Lane-Poole, *Saracenic Art*, pp. 174-177 and fig. 81; and Migeon, *Manuel*, p. 204 and fig. 160.

[2] Lavoix, *loc. cit.*, XXXII, p. 300; *Catalogue de la collection Goupil*, No. 74; Migeon, *Les cuivres arabes, G. B. A.*, 3e période, t. XXIII, p. 128; his *Manuel*, p. 210, and Fig. 171; and van Berchem, *Notes, loc. cit.*, pp. 17-21 and 39-40.

[3] Van Berchem, *Notes*, III, pp. 21-22 and 38; Migeon, *Manuel*, p. 204; and his *Documents d'art, etc.*, pp. 24-25.

[4] It was probably made in Cairo, and certainly in some town of the Mamlûk Empire as the inscription continues : «...under the reign of Our Lord al-Malik an-Nâṣir». Illustrated and described by G. Le Bon, *La Civilisation arabe*, figs. 288-289 and frontispiece (coloured); Lane-Poole, *op. cit.*, pp. 161 and 189 and figs. 74-75; his *Cairo*, pp. 103-105 and his *Social Life in Egypt*, p. 35; Franz Pascha, *Baukunst des Islam*, fig. 146; Migeon, *Les cuivres arabes, loc. cit.*, XXIII, pp. 128-129; Herz, *Catalogue... Musée de l'Art arabe*, p. 50 and pl. III and IV; Lane-Poole, *History*, fig. 68; van Berchem, *C. I. A., Égypte*, I, pp. 653-657 and pl. XXVII; his *Notes, loc. cit.*, pp. 22-23; and Migeon, *Manuel*, pp. 204-205 and figs. 161-162.

[5] It is difficult to find a concise term for this ornament. Sarre (*Reise in Kleinasien*, p. 47), speaking of the entrance of the Mosque of ʿAlâ ad-Dîn at Konia, says : «In dem Thürsturz ist das so vielfach in der orientalischen Kunst verwandte Motiv des profilirten Steinschnitts angebracht, dass verschiedenfarbiges Material (hier heller und dunkler Marmor) streifenförmig neben einander gesetzt an den Kanten in einander eingreift». Saladin (*Manuel d'Art musulman*, I, p. 449), speaking of the same portal, describes the ornament as «une série de bandes moulurées qui sertissent, comme d'une passementerie de galons à plat, les angles et les tympans de l'arc». Van Berchem (*Voyage en Syrie*, I, p. 219), describing the miḥrâb of the Jâmiʿ and Madrasat

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Egypt at this date appears to have escaped notice, has generally been recognized as Syrian[1]. I consider that the following series justifies us in narrowing down the term to «North Syrian».

(1) *Aleppo :* Mashhad of Ḥuseyn, built 608 (1211-1212) according to an inscription in the entrance-bay[2]. The east lîwân (Plate XXVII B) is decorated with the earliest (and hitherto unpublished) example of this ornament.

(2) *Konia :* Mosque of Sultan ʿAlâ ad-Dîn, main entrance finished in 617 (1220-1221), according to an inscription over the door-way[3]. Another inscription tells us that the architect was Muḥammad ibn Khaulan of Damascus[3]. We are thus brought back to Syria.

(3) *Aleppo :* Madrasat as-Sulṭânîya, built, according to a long inscription over the entrance bay, in 620 (1223-1224)[4]. The miḥrâb (Plate XXVIII B) is almost identical with the last, except that an outer band, forming a frame, has been added.

(4) *Aleppo :* Jâmiʿ and Madrasat al-Firdaus built 633 (1235-1236)[5]. The very large and extremely beautiful miḥrâb exhibits a further development of this interlacing treatment of variegated marble bands.

(5) *Konia :* The Qaraṭâi Madrasa, main entrance (Plate XXVIII A), dated 649 (1251-1252) by an inscription to right and left of the entrance bay[6]. Van Berchem, however has come to the conclusion that it is a surcharge, and

al-Firdaus, outside Aleppo, refers to it as «ce motif, où dominent de larges bandes tressées, suivant des lignes droites disposées en retour d'équerre».

[1] SALADIN, *Manuel,* II, p. 449; Miss LAMB, *Notes on Seljouk Buildings at Konia, Annual of the British School at Athens,* XXI, p. 35; VAN BERCHEM, *Voyage en Syrie,* I, pp. 219-221; and HERZFELD, *Mshattâ, Ḥira und Bâdiya, loc. cit.,* pp. 144-145.

[2] See above, p. 139.

[3] HUART, *Épigraphie arabe d'Asie Mineure,* in the *Revue sémitique,* III, p. 45; SARRE, *Reise in Kleinasien,* p. 48 and Taf. XVIII; VAN BERCHEM, *Inschriften aus Syrien, loc. cit.,* p. 133; SARRE, *Denkmäler persischer Baukunst,* p. 122; PROST, *Les Revêtements céramiques, M. I. F. A. O.,* XL, p. 9; and Miss LAMB, *loc. cit.,* Plate VII.

[4] BISCHOFF, *op. cit.,* p. 14; and BLOCHET, in the *Revue de l'Orient latin,* t. VI, pp. 45-46.

[5] See above, p. 146. The miḥrâb is illustrated in VAN BERCHEM and FATIO, *Voyage en Syrie,* II, pl. XLVI.

[6] SARRE, *Reise in Kleinasien,* p. 54; and HUART, *Épigraphie arabe d'Asie Mineure, Revue sémitique,* III, p. 35.

that the building is really of earlier date, in which case, he adds, one may suppose that it had for architect the same Muḥammad of Damascus [1], whose name appears on the Mosque of ʿAlâ ad-Dîn. The main entrance provides a fifth example of the motif we are discussing.

(6) *Jerusalem :* Qubbat as-Silsila, miḥrâb, a very beautiful polychrome example, unfortunately mutilated at the top (Plate XXIX A). Rebuilt, according to Mujîr ad-Dîn, by Bibars I [2].

Thus we have five examples of this ornament before the time of Bibars I; of these, three are in N. Syria, one, although in Asia Minor, is due to a Syrian architect, and the other possibly so. To these may be added the ornament above the main entrance to the sanctuary of the Great Mosque at Aleppo, which, as Herzfeld has remarked [3], must belong to the Mamlûk period, in spite of the inscription of Sultan Murâd just above the door-way. We are therefore amply justified in calling this ornament «North Syrian». It appears again in the entrance to the great Qalâûn complex, built 683-684 (1284-1285).

Striped Masonry. — This technique, which is called *ablaq* [4] in Arabic, is common in many parts of Syria where fine white limestone and black basalt are often equally available. Striped and chequered masonry is particularly common at Ḥamâ, but the earliest dated instance known to me is the Qaṣr al-Ablaq at Damascus of which Shihâb ad-Dîn has left us the following description [5] : «The Qaṣr al-Ablaq was constructed by al-Malik aẓ-Ẓâhir Bi-

[1] *Inschriften aus Syrien, loc. cit.*, p. 143; and his *Voyage en Syrie*, I, pp. 220-221.

[2] P. 434, Sauvaire's transl., p. 240; also in Le Strange, *Palestine under the Moslems*, pp. 152-153. Unfortunately the actual year is not given. Maqrîzî, however (in Quatremère, *Sultans Mamlouks*, I A, p. 140), mentions the despatch of workmen to Jerusalem in 659 (1262), to repair the Dome of the Rock, and later on (*ibid.*, I B, p. 113) says that the works were finished in 671 (1272-1273). The miḥrâb of the Qubbat as-Silsila may be safely placed in this period, and is therefore possibly earlier than the mosque of aẓ-Ẓâhir, but the fayence lining is of course due to Sultan Suleymân.

[3] *Encyclopaedia of Islam*, II, p. 235.

[4] The word signifies «black and white» or «mixture of two colours». Casanova, *Citadelle, loc. cit.*, p. 638.

[5] Quoted and translated by Quatremère, *Sultans Mamlouks*, I B, pp. 44-45 and reproduced by Casanova, *Citadelle*, pp. 638-639. Both Nowaïri, in his *Life of Bibars*, and Maqrîzî, in his *History of the Mamluk Sultans*, have given slightly varying accounts, which may be read in translation in Quatremère, *op. cit.*, I B,

bars al-Bunduqdâry in 665 (1266-1267). The outer wall, from top to bottom, is made of black and yellow stones, [the limestone of Syria soon takes an amber tint] arranged in such a way that a course of one colour is followed by a course of a different colour. The work has been executed with admirable skill and symmetry.» This palace having disappeared, I illustrate another example, the extraordinary fortress known as Qalʿat ibn Maʿân (Plate XXIX B), which, as we have already seen[1], is probably the work of Bibars I. The alternate courses of black and white masonry can be clearly seen in the photograph.

Masonry in courses of alternate colours is rare in Egypt at this time, and the next example, the Qaṣr al-Ablaq, built by an-Nâṣir Muḥammad in the Citadel of Cairo, Shaʿbân 713 (November-December, 1313) was probably copied from the palace of the same name at Damascus[2].

Columns used as a bond. — The oldest existing example of this technique in Egypt occurs in the Fâṭimide fortifications, where a row of stone circles at regular intervals may be observed in the masonry at a height of about 2 metres from the ground. They are the ends of columns set in perpendicular to the face of the wall, to serve as a bond between the rubble core and the smooth facing stones.

It does not occur in the pre-Muḥammadan architecture of Syria, at least no example is to be found in the works of de Vogüé[3] or Butler[4], nor have I ever seen one myself, but there is an earlier Muslim example mentioned in the texts. Muqaddasî tells us that his grandfather (a Palestinian) employed it, when working at ʿAkkâ for Ibn Ṭûlûn. His account is as follows :

«This city had remained unfortified until the time when Ibn Tûlûn visited it, coming from Tyre, where he had seen the fortifications and the walls

pp. 44-45. Maqrîzi says that it was destroyed by Timur when he took the town in 803 H. (March 1401). A *qaṣr al-Ablaq* is known to early Muslim legend and is mentioned in the *Kitâb al-Aghâni*, Hariri's *Maqamât*, al-Meidani, I, p. 218; etc. It is said to have belonged to a Jew named Samaw'al (Samuel) b. ʿAdîyâ, and was so-called on account of its variety of colours. It became proverbial for its resistance to every assault. Yâqût says that its ruins lay near Teima. See Seligsohn's article : *al-Ablak*, in the *Encyclopaedia of Islam*, I, pp. 71-72. To sources cited add Masʿûdî, *Prairies*, III, pp. 198-199.

(1) See above, pp. 151-152.

(2) Casanova, *Citadelle, loc. cit.*, pp. 638-639.

(3) *Syrie centrale*, Paris, 1865-1877.

(4) *Architecture and other Arts* — Part II of

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which are there carried round so as to protect the harbour. Then Ibn Tûlûn wished to construct at ʿAkkâ a fortification that should be as impregnable as that of Tyre. From all provinces artificers were brought together; but when the matter was laid before them, all averred that none in these days knew how the foundations of a building could be laid in the water. Then one mentioned to Ibn Tûlûn the name of my grandfather, Abu Bakr, the architect, saying that if perchance any had knowledge in these matters, it would be he alone. So Ibn Tûlûn wrote to his Lieutenant in Jerusalem commanding that he should despatch my grandfather to him; and on his arrival they laid the affair before him. 'The matter is easy' said my grandfather; let them bring such sycamore beams as be large and strong! These beams he set to float on the surface of the water, as a prolongation of the town walls, and he bound them one to the other; while towards the west he left the opening for a mighty gateway. And upon these beams he raised a structure with stones and cement. After every five courses he strengthened the same by setting in great columns. At length the beams became so weighted that they began to sink down; but this was little by little, and finally they rested on the sand. Then they ceased building for a whole year, that the construction might consolidate itself, after which, returning, they began again to build. And from where it had been left off, continuing, my grandfather made a junction between this and the ancient city walls, bringing the new work right up into the old, and causing the two to join together. Across the western gate of the port he built a bridge, and every night when the ships had come within the harbour they drew across the water-gate a chain, even as was the case at Tyre. It is reported that my grandfather received for this matter the sum of 1000 Dinars (£ 500), besides robes of honour, horses, and other gifts, and his name was inscribed over the work...[1] »

Although this technique does not occur elsewhere in Egypt, except in the Fâṭimide fortifications, and the Mosques of aṣ-Ṣâliḥ Ṭelâyeʿ[2] and aẓ-Ẓâhir[3],

the *Publications of the American Archaeological Expedition to Syria in 1899-1900;* also his *Ancient Architecture in Syria* — Part II of the *Publications of Princeton University Archaeological Expeditions to Syria in 1904-1905 and 1909.*

[1] Muqaddasî, pp. 162-163, transl., by G. Le Strange in the *Palestine Pilgrims' Text Society,* III (3), pp. 30-31, and in his *Palestine under the Moslems,* pp. 328-329. See also Ranking's transl., pp. 269-270.

[2] In the basement below the mosque proper.

[3] In the external buttresses only.

it was widely used throughout Syria during the period of the Crusades and after, *e. g.* at Sajette[1], Ascalon[2], Salamîyya[3], Sejar (Shaizar)[4], Jebeil[5], Bosra[6], Damascus[6], Lattakîya[7], Tripoli (Tower of Lions)[8] and Beyrut[9]. It is employed also at Aleppo in the Jâmi' Qiqân, in the minaret of the White Mosque at Ramleh[10] and in the Walls of Jerusalem (xvi^th century). Saladin mentions its use in the fortifications of Heraclea[11], without suggesting a date, and I have noticed two apparently unrecorded instances, the glacis of the Citadel at Aleppo and in the only surviving gate at Ḥomṣ — the Bâb Masdûd It is also to be found employed at Diyarbekr in a tower, dated 634 (1236-1237)[12].

À propos of Jebeil, Renan[13] attributes this method especially to the Crusaders. Van Berchem[14] differs and doubts if they ever used it, pointing out that in fortifications whose origin is undoubtedly Latin one does not find it. This conclusion appears to me to be open to grave doubt *à priori*, since the wars of the Crusades lasted for almost exactly two centuries, during which each side exercised a great influence on the other in every way, and it seems unlikely that any device in fortification should remain the exclusive property of one side, especially a device such as this, which must have greatly strengthened walls and towers against the battering ram. In support of the opposite view I would cite the mole at Cæsarea, perhaps the most extreme case of the use of columns as a bond. This cannot be the work of Herod as we are told by Josephus that his mole was built of stones 50 feet in length, 18 in breadth,

[1] Rey, *L'Architecture militaire des Croisés en Syrie*, p. 158.

[2] Bædeker, *Palestine and Syria* (1912), p. 123.

[3] Van Berchem and Fatio, *Voyage en Syrie*, I, p. 168.

[4] *Ibid.*, I, p. 179.

[5] *Ibid.*, I, pp. 105-106.

[6] *Ibid.*, I, p. 106 (mention only).

[7] Dussaud, *Voyage en Syrie*, in the *Revue archéol.*, 3^e sér., t. XXVIII, pp. 327-329 and fig. 20; and van Berchem and Fatio, *op. cit.*, I, p. 290.

[8] Van Berchem and Fatio, *op. cit.*, I, p. 122 ff., and Buckingham, *Travels*, p. 465.

[9] Ṣâliḥ ibn Yaḥyâ (xv^th cent.) quoted by Schefer, *Nassiri Khosrau*, p. 44 *n.*

[10] This minaret is dated 718 H. (1318). See van Berchem, *Inscriptions arabes de Syrie*, in the *Mém. de l'Inst. égyptien*, III, pp. 473-480.

[11] *Manuel d'Art musulman, I. — L'Architecture*, p. 37, and fig. 18.

[12] Van Berchem and Strzygowski, *Amida*, pp. 105-106, and plate XIX.

[13] *Mission en Phénicie*, p. 159 f. and 547 (quoted by van Berchem).

[14] Van Berchem and Fatio, *Voyage en Syrie*, I, pp. 106-107.

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and 9 in depth[1]. Moreover Maqrîzî attributes it to the Crusaders saying that «Bibars directed his course to Kaisariyeh....... The inhabitants took refuge in the Citadel, which bore the name of Khadra (the Green) and was one of the finest and strongest fortresses. The Franks had transported to this place columns of granite, which they placed transversely in the walls, so that they had not to fear sapping, and could not fall when they should be undermined[2].» Here we have a definite reference to the Crusaders having employed this method[3].

The Buttresses with bevelled tops (an anomaly in an almost rainless climate) which take the thrust of the arcades are certainly due to the influence of the Crusaders. Simple buttresses with bevelled tops are frequently met with in their churches[4], although they are not the invariable rule[5]. They first appear in Muslim architecture in the Mosque at Ramla (Plate XXX) built by Sultan Bibars in 666 (1267-1268) after the taking of Jaffa[6]. His great mosque at Cairo, and his mosque at Ramla were therefore built simultaneously and it is highly probable that prisoners of war were employed on the former.

Summary. — The Mosque of Bibars, therefore, represents an Egyptian type, strongly modified both in plan and decoration by influences from Northern

[1] Quoted in *Survey of Western Palestine*, II, p. 13.

[2] Quatremère, *Sultans Mamlouks*, I b, p. 7. Also in the *Survey of Western Palestine*, II, p. 14.

[3] Dussaud believes the same technique at Lattakîya to be Muslim work. See his *Voyage en Syrie*, in the *Revue archéol.*, 3e série, t. XXVIII, p. 329 n. 2.

[4] *E. g.* Jebeil (van Berchem and Fatio, *Voyage en Syrie*, II, pl. V); Tortosa (*ibid.*, pl. LXXI); Krak (*ibid.*, pl. XXI); Hebron (Vincent, Mackay and Abel, *Hébron*, pl. XXIV); Samaria, Church of S. John (photograph in my collection); Jerusalem, Church of S. Anne, (do.), and Gaza, church now Great Mosque, (do.).

[5] They are lacking at 'Abu Ghosh (*Survey of Western Palestine*, III, plate to face p. 132); Bīra (plan, *ibid.*, III, p. 88); al-Qubeiba (*ibid.*, III, p. 131); Ludd (*ibid.*, II, p. 269 and de Vogüé, *Églises de la Terre Sainte*, pl. XXVII), and Margat (van Berchem and Fatio, *op. cit.*, II, pl. LXVIII and LXIX).

[6] The town fell on Gumâda II (8th March 1268). See van Berchem, *Inscriptions arabes de Syrie*, in the *M. I. É.*, III, p. 473 ff. The minaret of this mosque, the so-called «Tower of the Forty Martyrs», has buttresses also, but it was not built until 718 (1318); *ibid.*, pp. 479-480.

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Syria and Northern Mesopotamia, due partly to the intimate connection between this area and Egypt under the Ayyûbides, but chiefly to the vast number of refugees from these regions who had sought refuge in Cairo during the Mongol reign of terror. Finally the influence of the Crusaders is shown in the buttresses with bevelled tops.

IV. — THE MIḤRÂB

IN THE N.-W. WALL OF THE MOSQUE OF ʿAMR.

Maqrîzî says that in the reign of Bibars, it was found that the north wall of the mosque of ʿAmr was out of the perpendicular, and threatening to fall. The Chief Qâḍî, having made a personal inspection, consulted the architect, and stopped the water running into the fountain, because of the damage it was causing to the foundations. He also built buttresses against the north wall of the mosque. It was soon found, however, that the structure was still unsafe, and an appeal to Sultan Bibars resulted in the *complete rebuilding of the north* (= *N.-W.*) *wall*[1]. There can be little doubt that the stucco miḥrâb which still decorates the outer side of this wall (Plate XXXI)[2], and which, by the style of its ornament, must be placed in the second half of the XIIIth century, is due to Bibars I.

QAṢR AL-ʿUMAYD.

Another monument of Bibars, a fort called Qaṣr al-ʿUmayd, existed until the seventies of the last century, on the sea shore about 45 miles to the west of Alexandria. Bayle St. John, who passed by it in 1847, has left us a description sufficiently detailed to justify a verbatim quotation[3].

«September 19th 1847. Three hours from this a dilapidated Saracenic castle, called Kasr el Amaïd, rising near the beach amidst the white sand-hills

[1] Maqrîzî, *Khiṭaṭ,* II, p. 252, and Corbet, *Mosque of Amr,* in the *J. R. A. S.,* 1890, pp. 783-784.

[2] Also illustrated by Corbet, *loc. cit.*

[3] *Adventures in the Libyan Desert,* New edition, Murray, London 1861. I owe this interesting reference to Mr. Bernard Berenson.

and the thickets, tempted us to ride out of our way to glance at it. There was something so solitary and mysterious about it, as it reared its ruined form near the ceaselessly rolling wave, with the stars looking through the shattered windows or between the broken battlements, as through a Gothic building on an English beach — a haunted church, or a legendary castle — that I could scarce prevail on myself to proceed without our becoming further acquainted; but it was at length determined to reserve a complete examination to our return, when we should pass by day [1]. »

« October 18th 1847. We watered at one of the wells of Shemaimah and then proceeded to Kasr-el-Amaÿd, the Saracenic structure we passed at night on our way out. It is a four-sided building, with a square tower or ring projecting from the centre of each face. The entrance is low, and formed of thin blocks of red granite; it looks southward, and is placed in an arched niche, over which there is an inscription beautifully preserved, explaining that this castle was built by Ahmed-el-Tahír-el-Yasmurí, under the orders of Bibars, Sultan of Egypt, whose arms appear beneath in the shape of two lions rampant. Similar ones occur on a bridge at Cairo, attributed to the same Monarch. All the rooms within are arched. There are two stories; and I am told that this building is conspicuous at a great distance out at sea, although it is not usually mentioned as a landmark. »

« Leaving this place we pushed on to Abusir, which we reached after a hard ride at about seven o'clock . . . . . [2] »

I visited the site of this fort on the 12th April 1922, and learnt to my sorrow that it no longer existed. A light-house, consisting of a great iron tripod, stands close by. The tripod occupies the centre of a courtyard, formed by the quarters of the guard and attendants, built out of the stone of the old fort, of which traces of the rubble foundations alone remain. This light-house was erected by order of the Khedive Ismâ'îl, somewhere between 1870 and 1880, in consequence of a wreck which had taken place on this coast. Ships, however, scarcely ever approach this spot, and the light-house is now abandoned. Major Bramley, Governor of the District, has ascertained that some of the Arabs of the neighbourhood still remember the square fort which stood here.

[1] *Adventures in the Libyan Desert*, p. 16. — [2] *Ibid.*, pp. 173-174.

I propose to conclude this memoir by an extract from Maqrîzî which records other works executed by Sultan Bibars in Egypt :

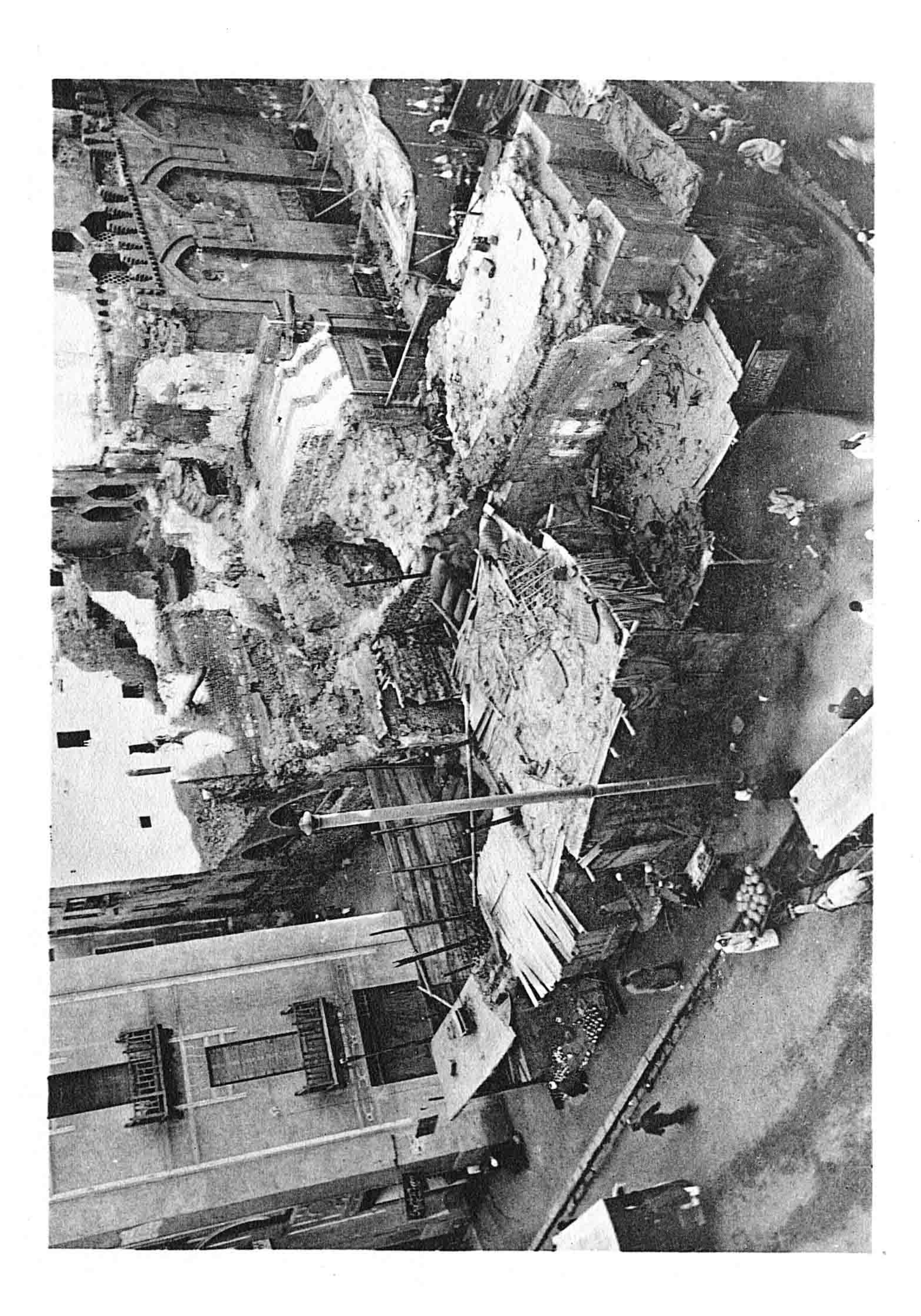
« The Emīr Gamāl ad-Dīn ibn Yagmur was entrusted with the rebuilding of the Castle of Rôḍa [1], a part of which had fallen down. The Prince repaired all the damage which this edifice had suffered, established *janjars* (?) there, and restored it to its original magnificence. Each of the towers was entrusted to one of the Emīrs, whose names were as follows : Qalāūn, Izz ad-Dīn Halebi, Izz ad-Augan Baiṣârî, and others. Each of these Emīrs was ordered to place his own quarters and his stables in the tower which had been allotted him; and the keys of the castle were handed over to them.

« The Sultan gave orders for the construction of the arches of the causeway of Shobrament, in the province of Gīza, since, each year, an immense tract of land remained without being flooded. This work was of the greatest benefit to the neighbouring provinces. By order of this Prince the walls of Alexandria were reconstructed, and a sum of money was allotted each month for this repair. They built near Rashid [Rosetta], a tower in order to survey the sea [2]. »

K. A. C. Creswell.

[1] A fortress had existed here at the time of the Arab Conquest. Dismantled by ʿAmr, it had remained neglected until Ibn Ṭûlûn, threatened by the advance of the Khalif's General Musa ibn Bughâ in 263 (876-877), rebuilt it for the purpose of guarding his treasure and his harîm, Musa, however, never came and the fortifications were gradually undermined by the Nile. Sultan Ṣâliḥ Negm ad-Dîn built another fortress here in 638 (1240-1241) and the Mamlûks with which he garrisoned it were called Bahrite Mamlûks or Mamlûks of the River. Al-Muʿizz Aibak pillaged it for material for the madrasa which he built in the Sharia' al-Kharab in 654 (1256). Repaired by Bibars (as above) it was subsequently pillaged for material by Qalâûn and Muḥammad an-Nâṣir and only a few towers remained in Qalqashandî's day (c. 1412). See Ibn Duqmâq, IV, pp. 109-110; Qalqashandî, pp. 339 and 347; Wüstenfeld's transl., pp. 59-60; Maqrîzî, *Khiṭaṭ*, I, p. 286 (Casanova's transl., III, p. 106); II, pp. 178-180, 183, and 406; Ibn Iyâs, *Ta'rîkh*, I, p. 83, l. 16; as-Suyûṭî, Jarrett's transl., p. 489; *Description de l'Égypte, état moderne*, XV, pp. 465-467; XVIII, pp. 331 and 470, and *Atlas*, I, planches 25 and 55; Marcel, *Égypte*, pp. 156 and 160; Corbet, *Life and Works of Aḥmad Ibn Ṭûlûn*, in the *J. R. A. S.*, 1891, p. 533; Butler, *Arab Conquest*, pp. 242-243; Becker's art. *Cairo*, in the *Encyclopædia of Islam*, I, p. 821; and Herz, *Die Baugruppe des Sultans Qalāūn*, p. 37.

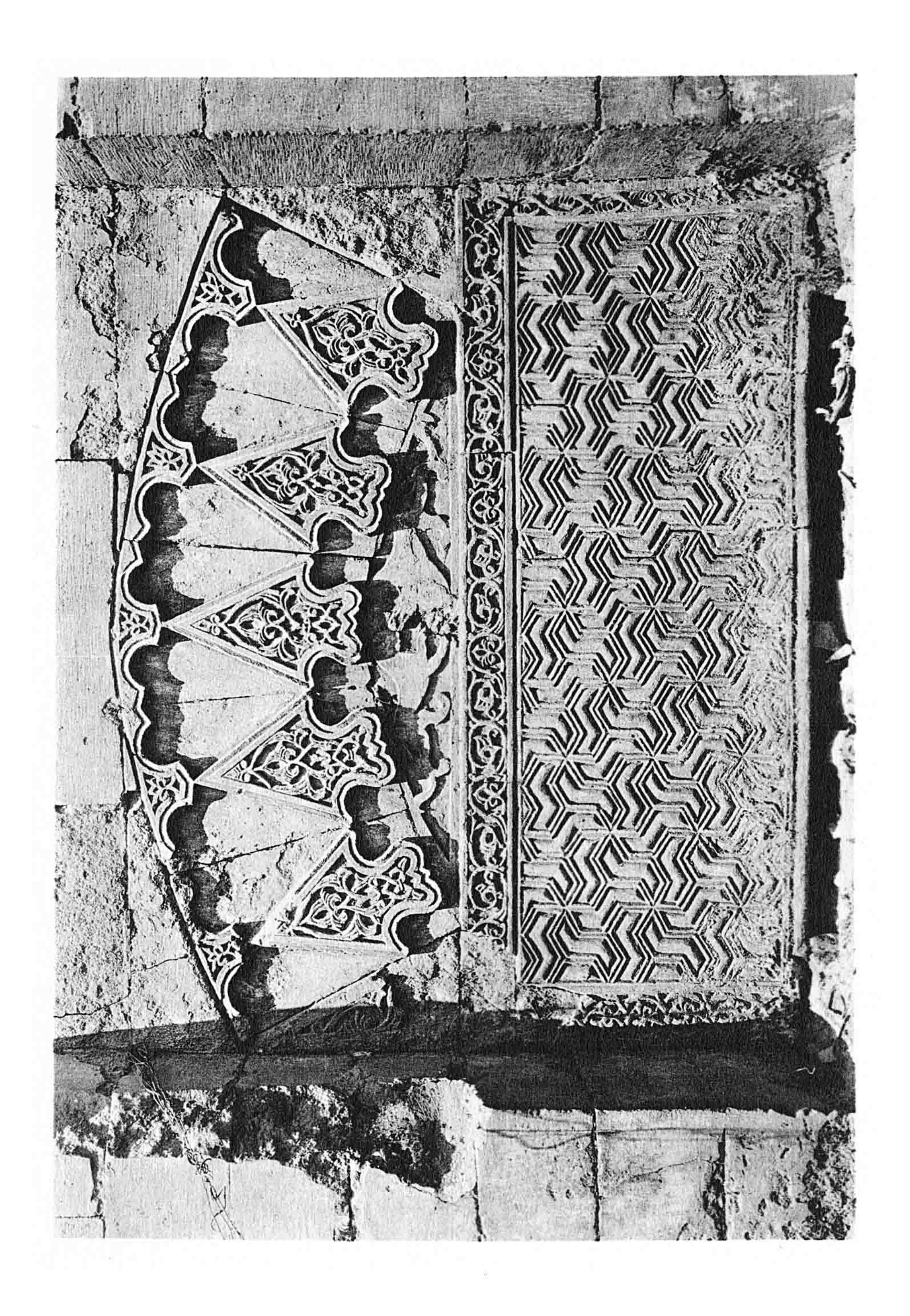
[2] Quatremère, *Sultans Mamlouks*, I A, p. 140.



Madrasa of Bibars : general view of ruins from roof of Qalâûn's mausoleum.

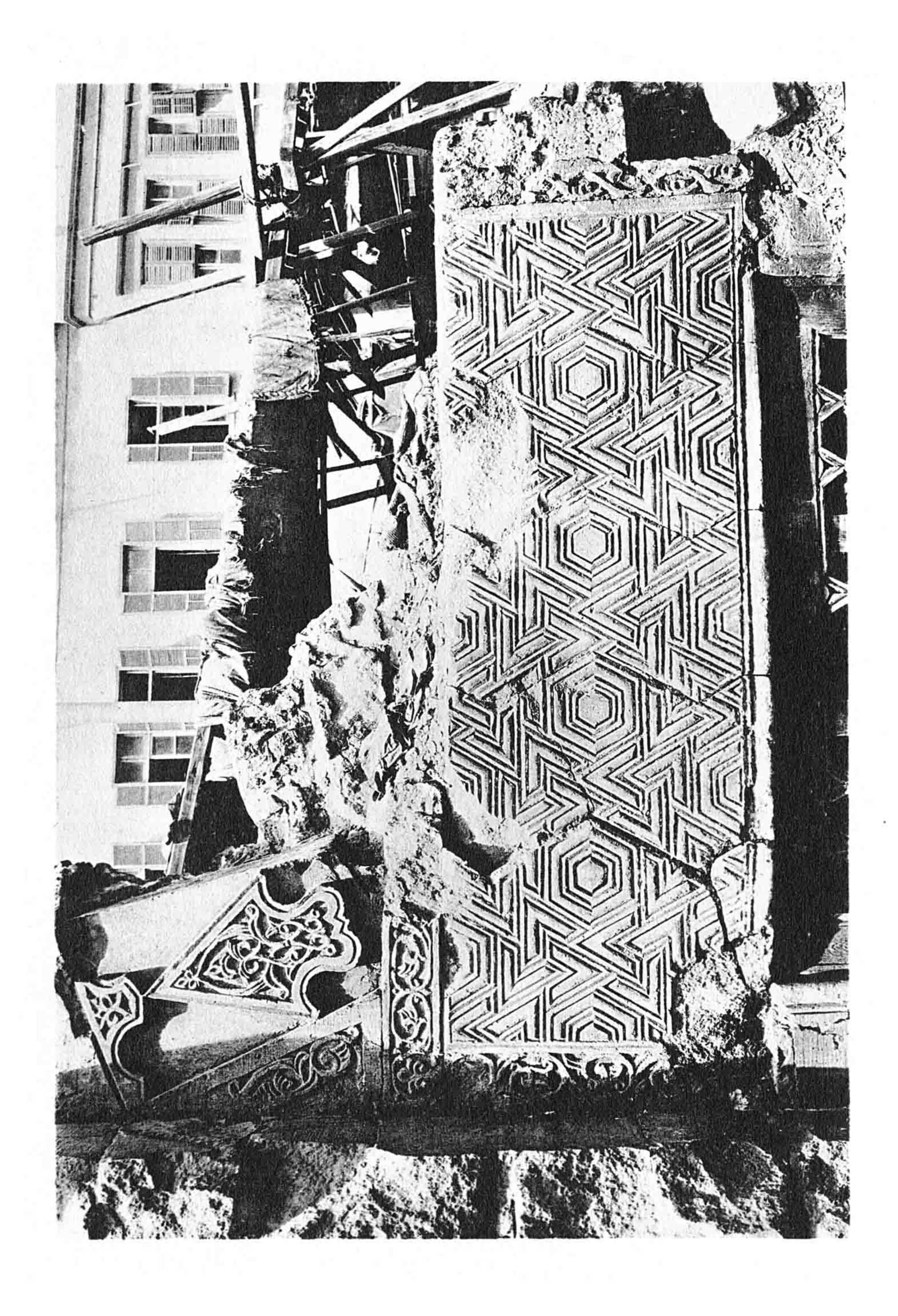
IMP. CATALA FRÈRES, PARIS.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Madrasa of Sultan Bibars : ornament over window of Sebil.

IMP. CATALA FRÈRES, PARIS.



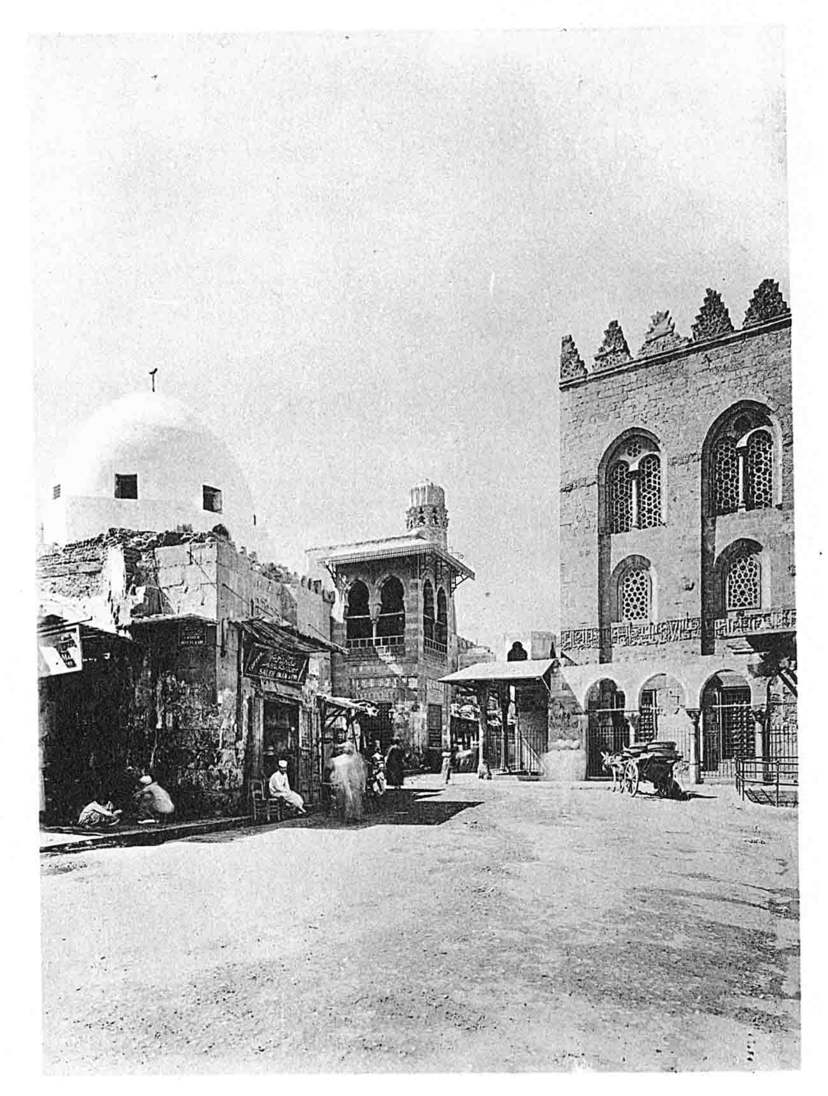
Madrasa of Sultan Bibars : ornament over second window of S.-W. façade.

IMP. CATALA FRÈRES, PARIS

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

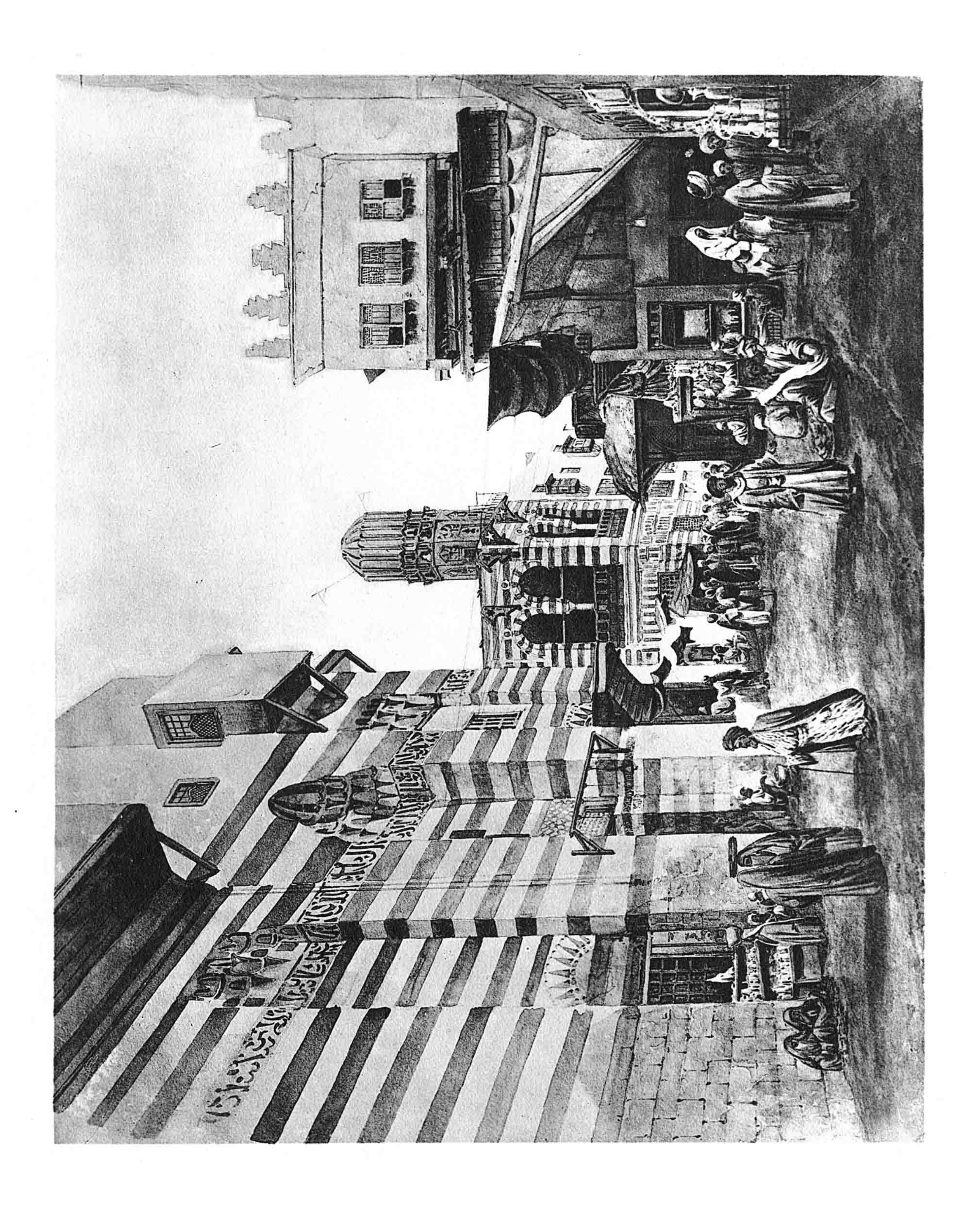


A. View of Madrasa of Sultan Bibars, etc., painted by David Roberts, R. A., in 1839.



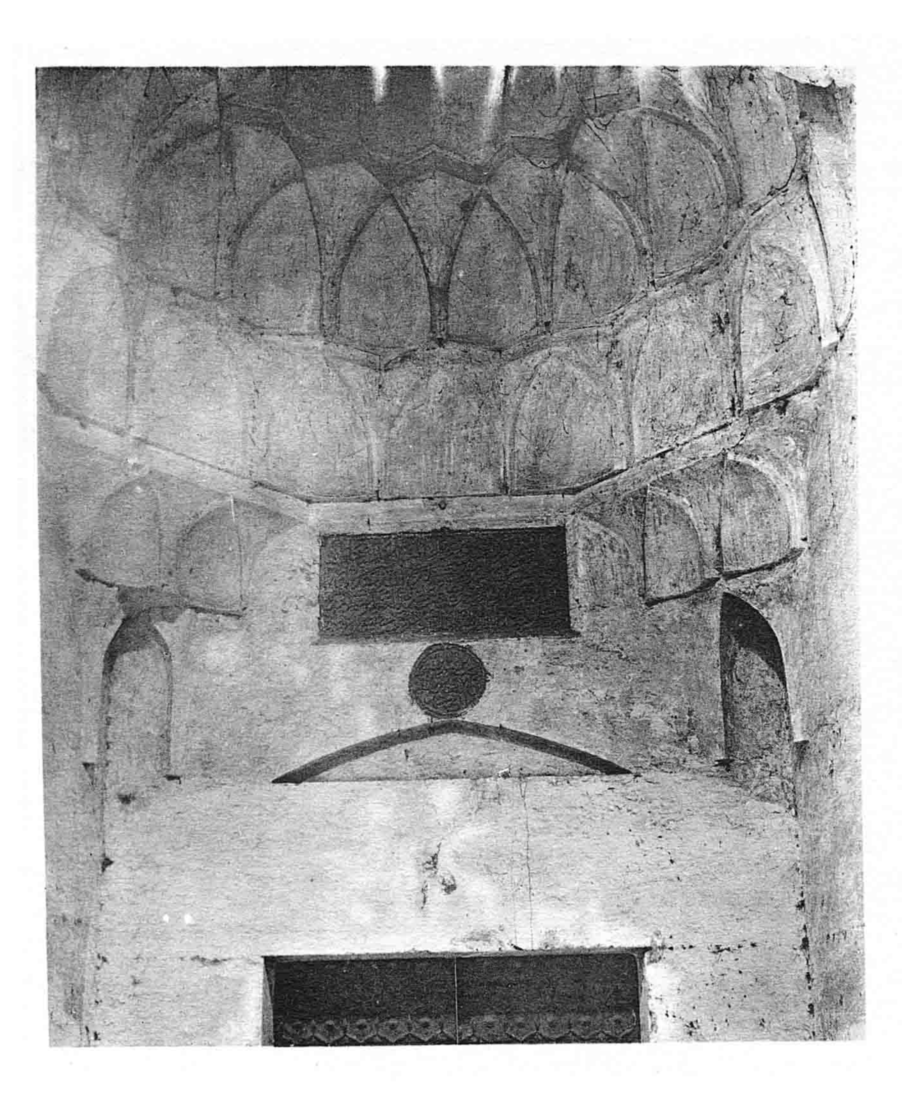
B. The same view, to-day.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

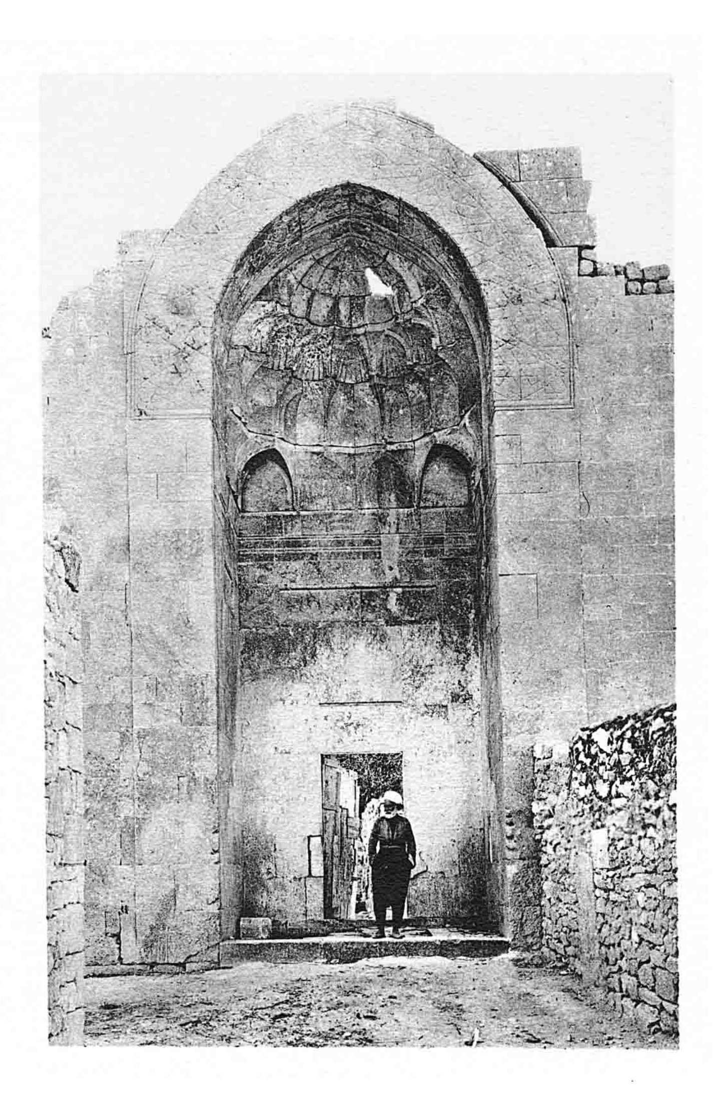


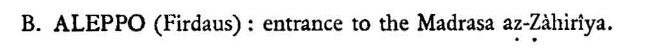
View of the Madrasa of Sultan Bibars, etc., painted c. 1850 A. D.

IMP. CATALA FRÈRES, PARIS



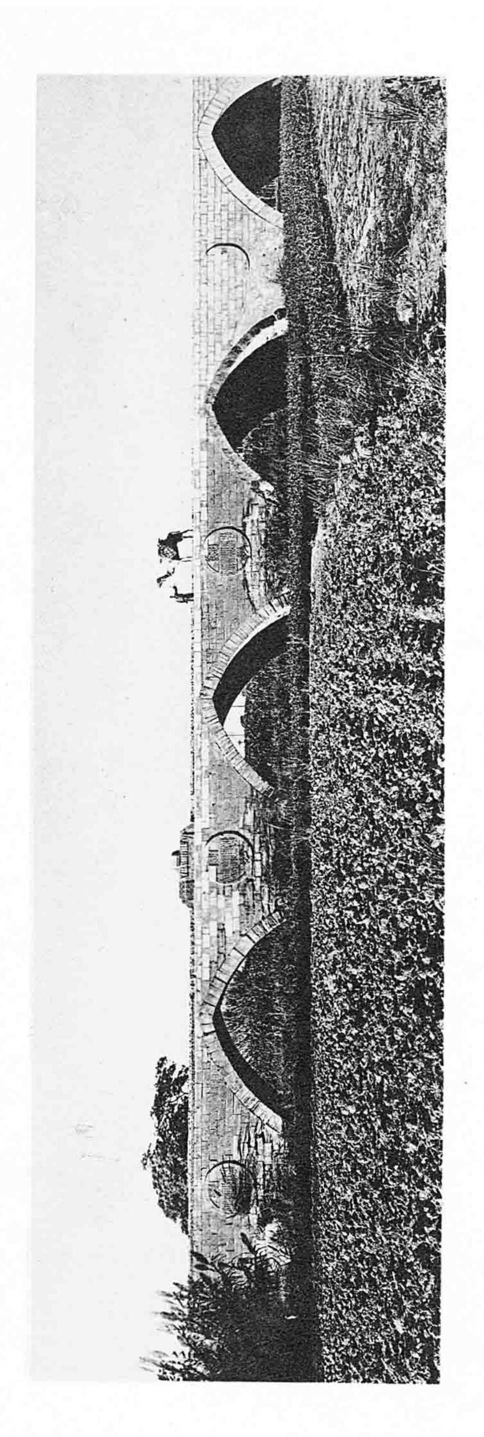
A. ALEPPO : entrance to the Madrasa of Shad Bakht.

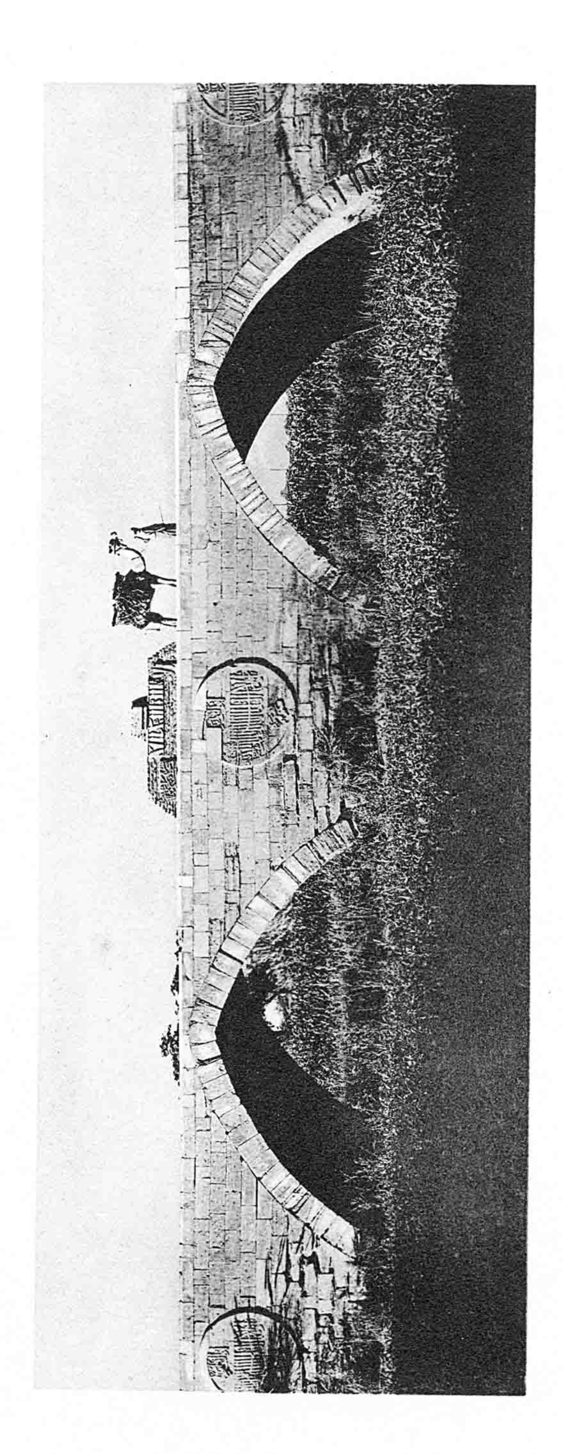




B. ALEPPO (Firdaus) : entrance to the Madrasa az-Zâhirîya.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

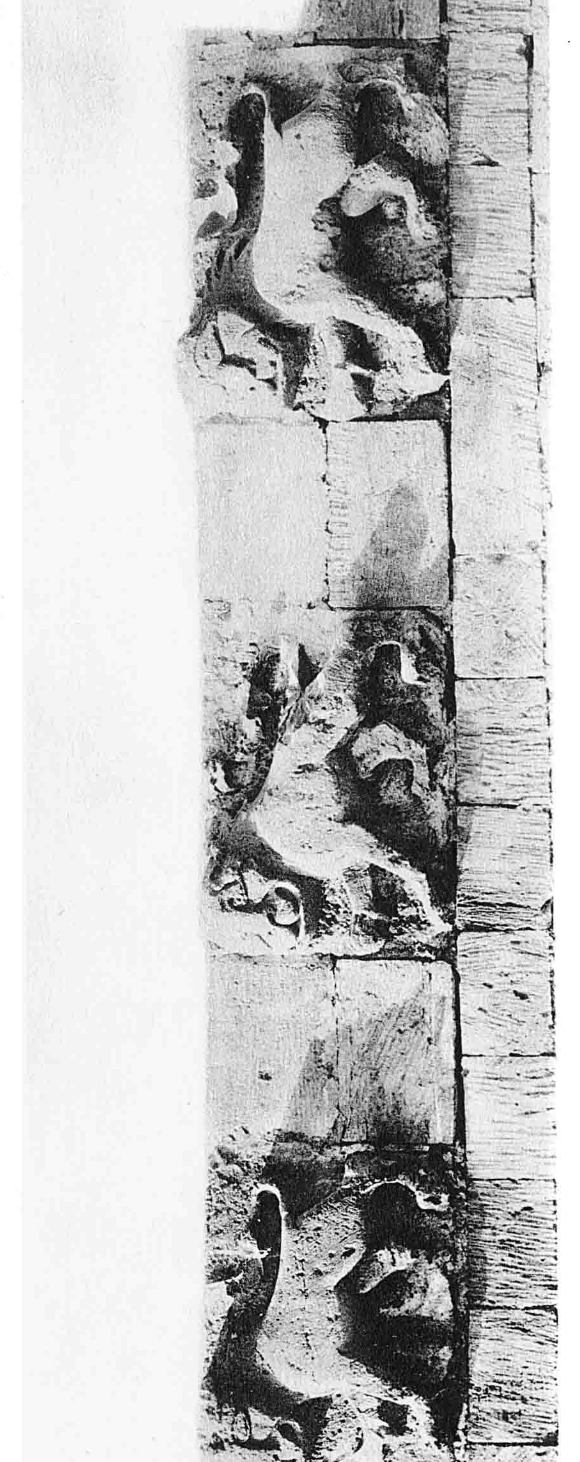




Bridge of Bibars, near Shubra village ; south side.

IMP. CATALA FRÈRES, PARIS

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



A. Bridge of Bibars : Panthers on north side.





C. URFA : Panther of Bibars ?



B. KERAK : Panthers of Bibars.

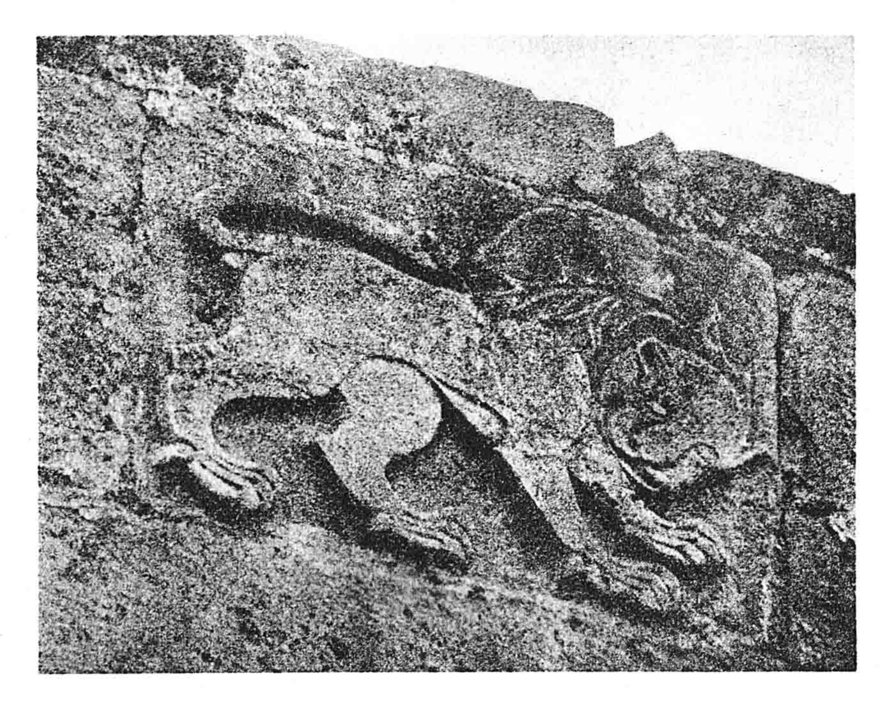
IMP. CATALA FRÈRES.



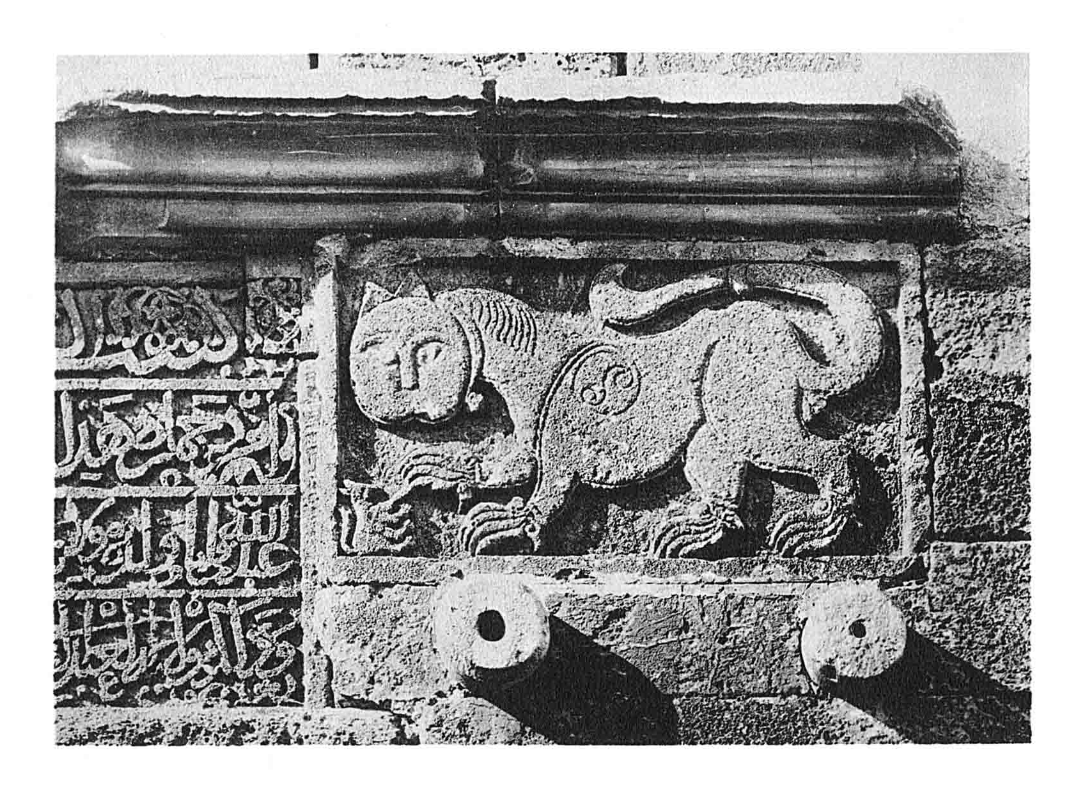
JERUSALEM : Panthers of Bibars on Bâb Sitti Maryam.

IMP. CATALA FRÈRES, PA

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

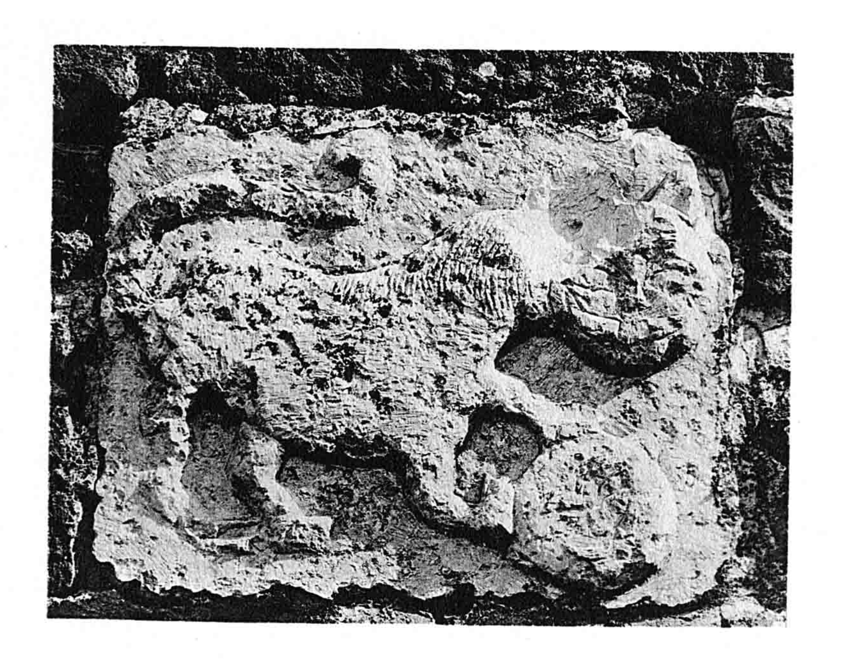


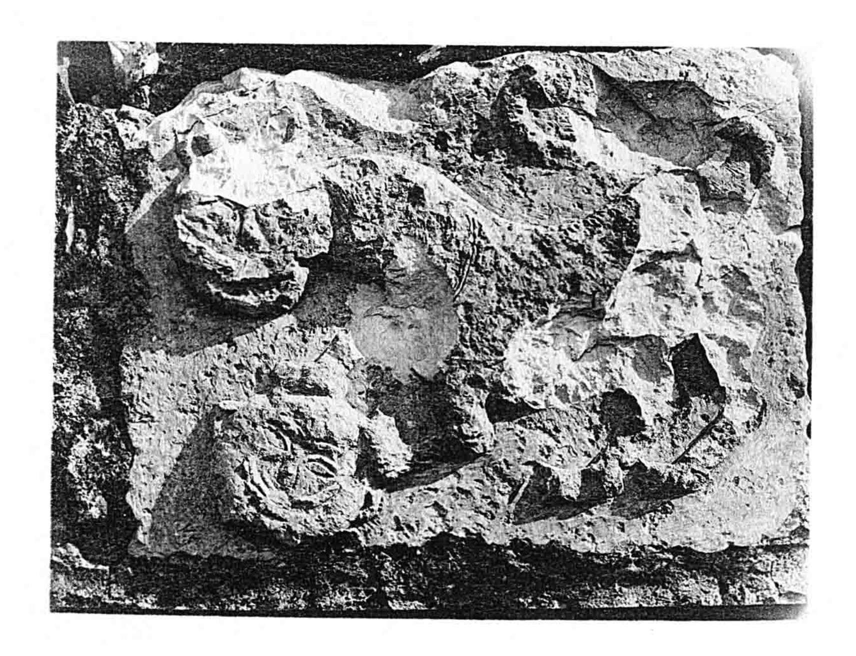
A. AKKA : Panther of Bibars [From Sobernheim, *C. I. A.*, II].



B. LUDD : Panther of Bibars, on Jisr Jindâs.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].





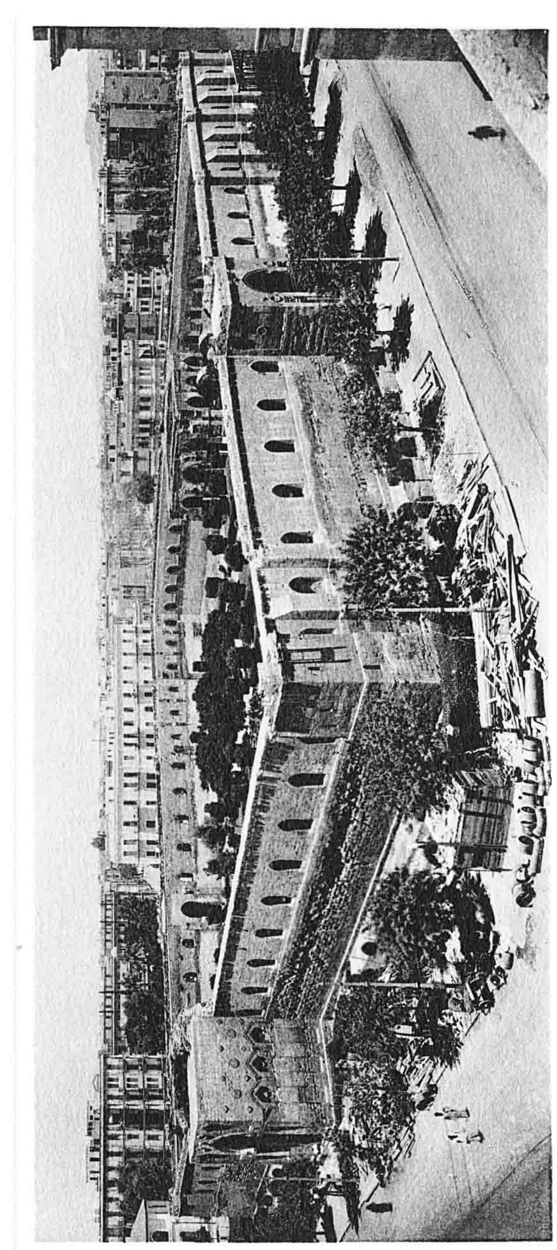
MEZERIB : Panthers of Bibars on Jisr al-Maddâd.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

IMP. CATALA FRÈRES, PARIS.



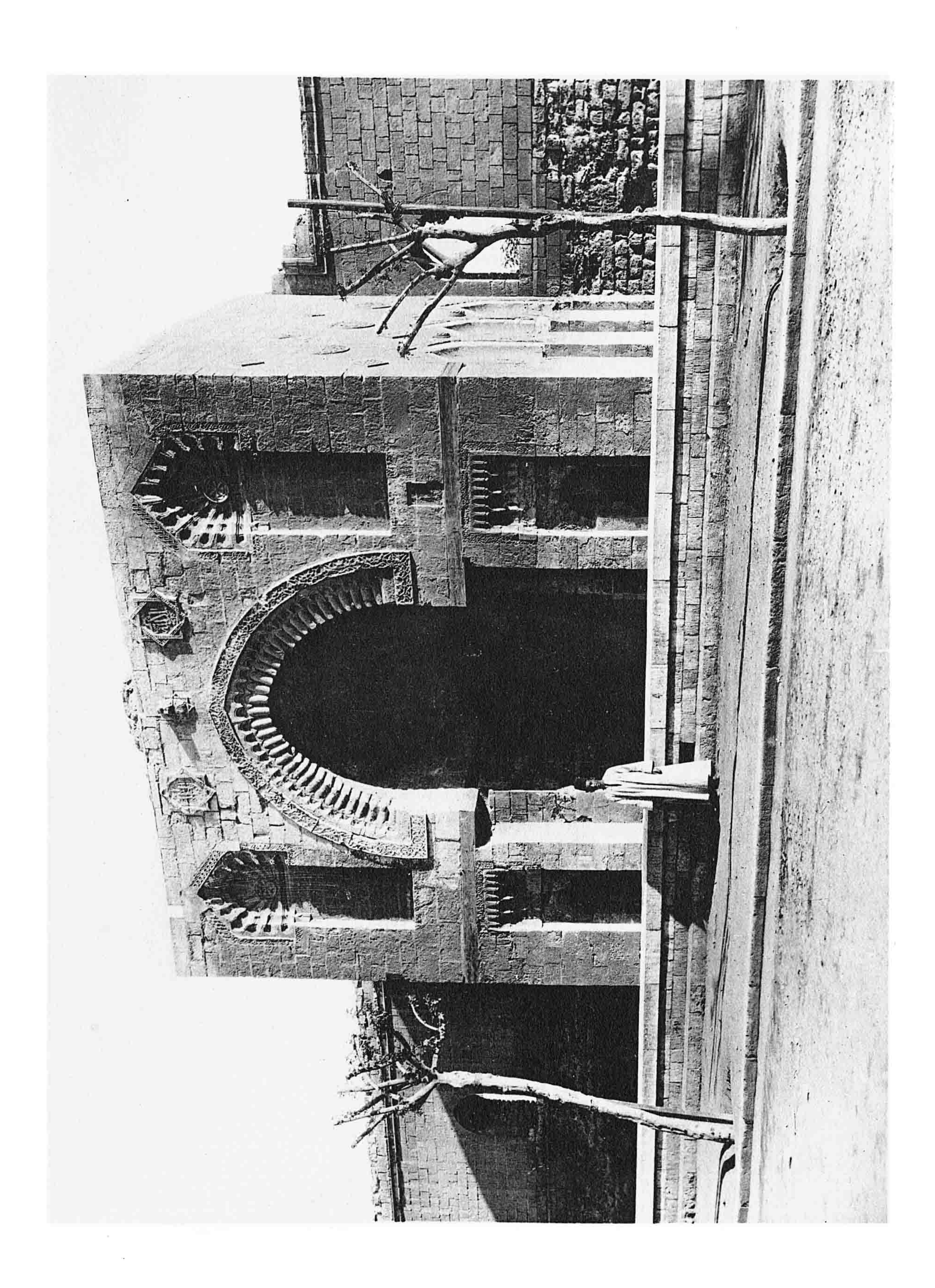
A. DAMASCUS : arms of Nûr ad-Dîn or Bibars ?



B. CAIRO : Mosque of Bibars, general view.

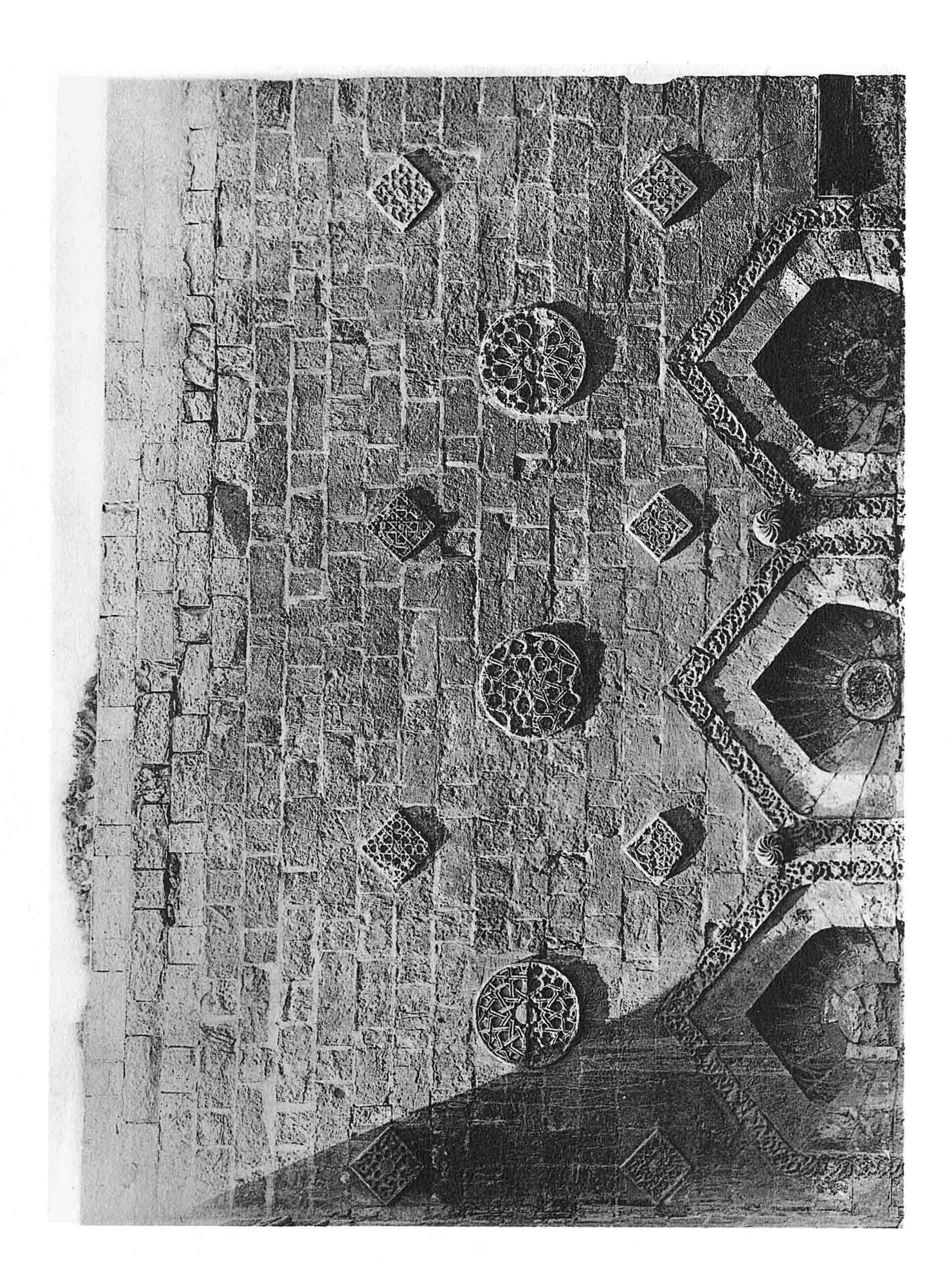
IMP. CATALA FRÈRES, PARIS.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of Bibars main entrance.

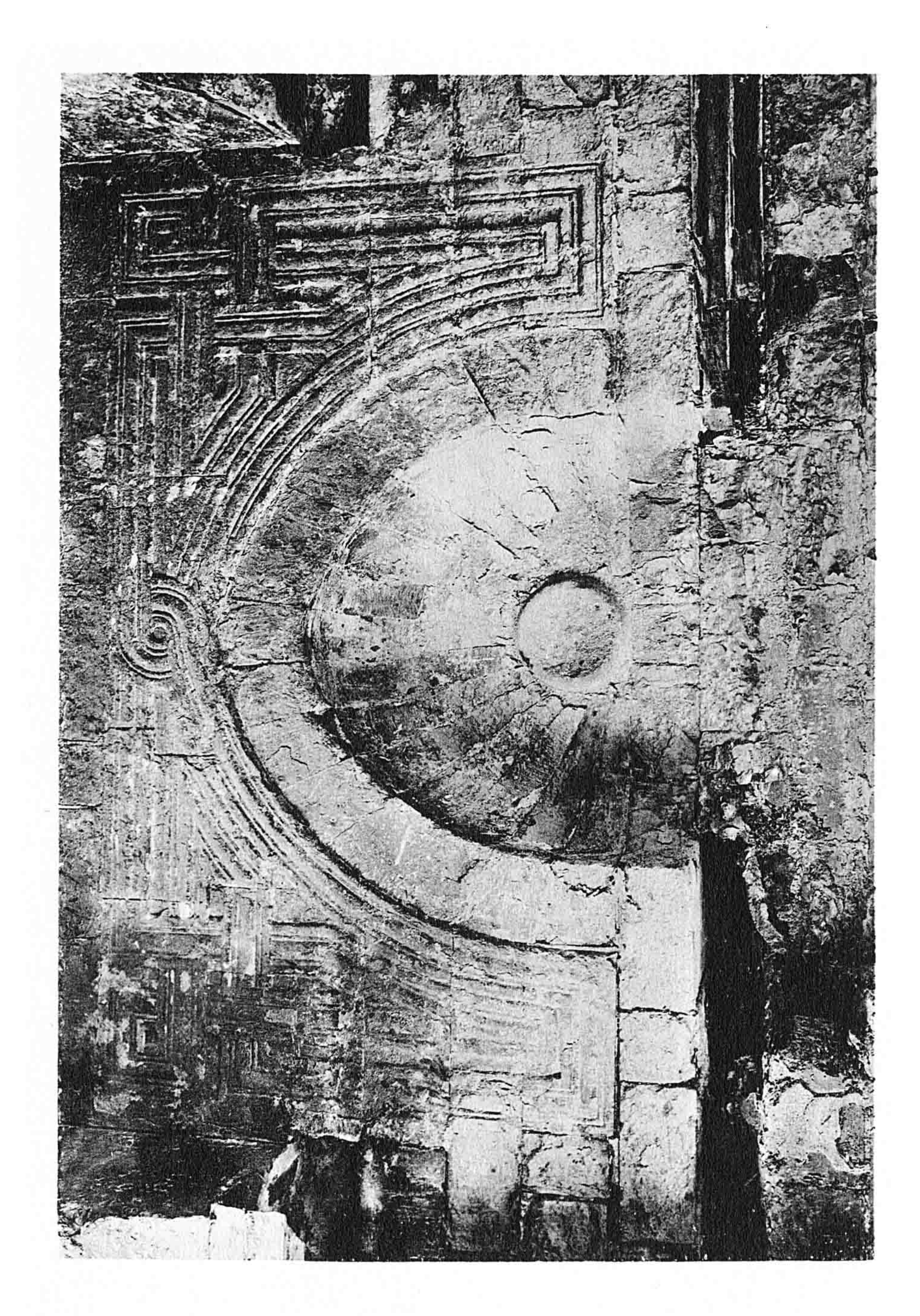
IMP. CATALA FRÈRES, PARIS



Mosque of Bibars : left flank of main entrance.

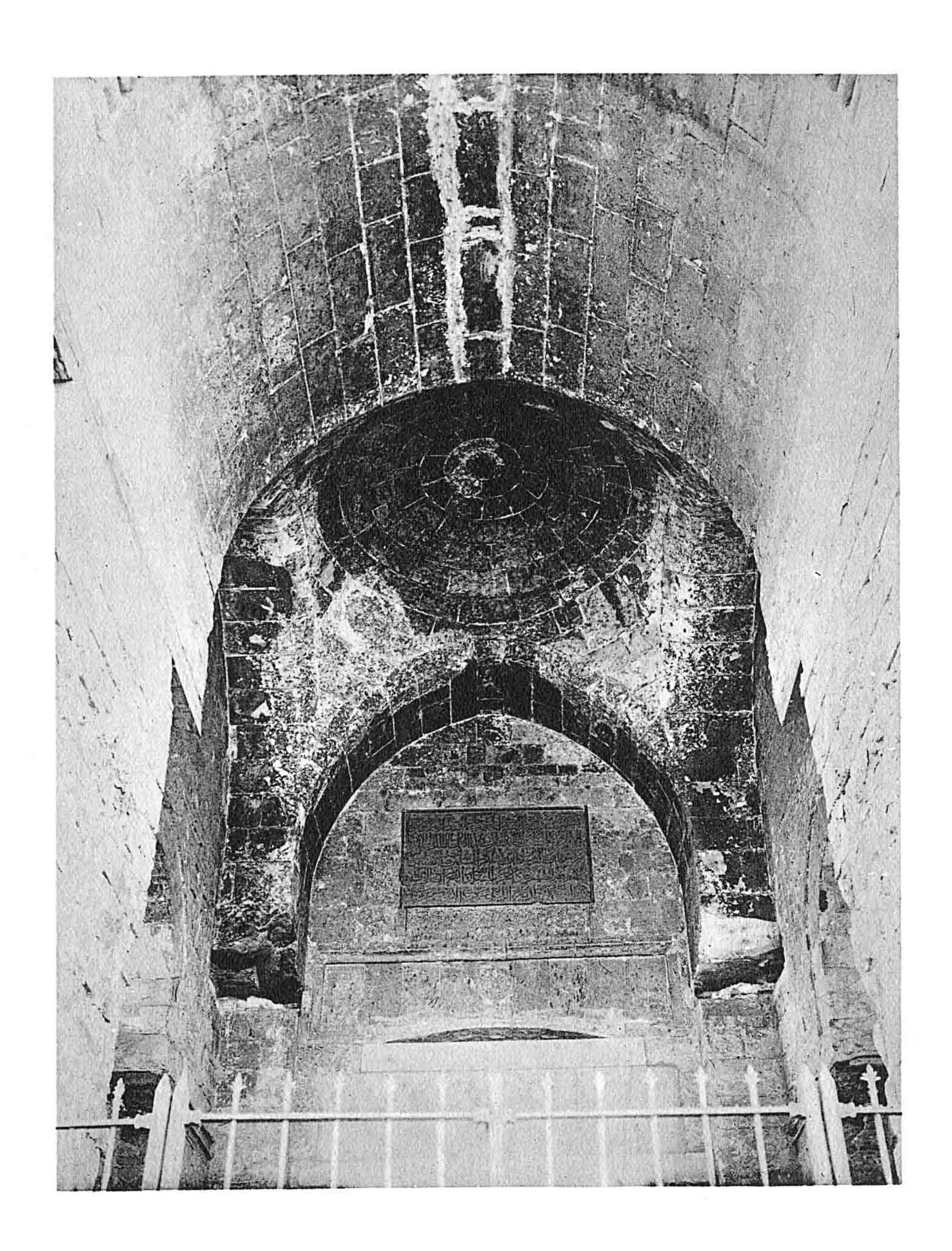
IMP. CATALA FRÈRES, PARIS.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of Bibars : ornament inside main entrance.

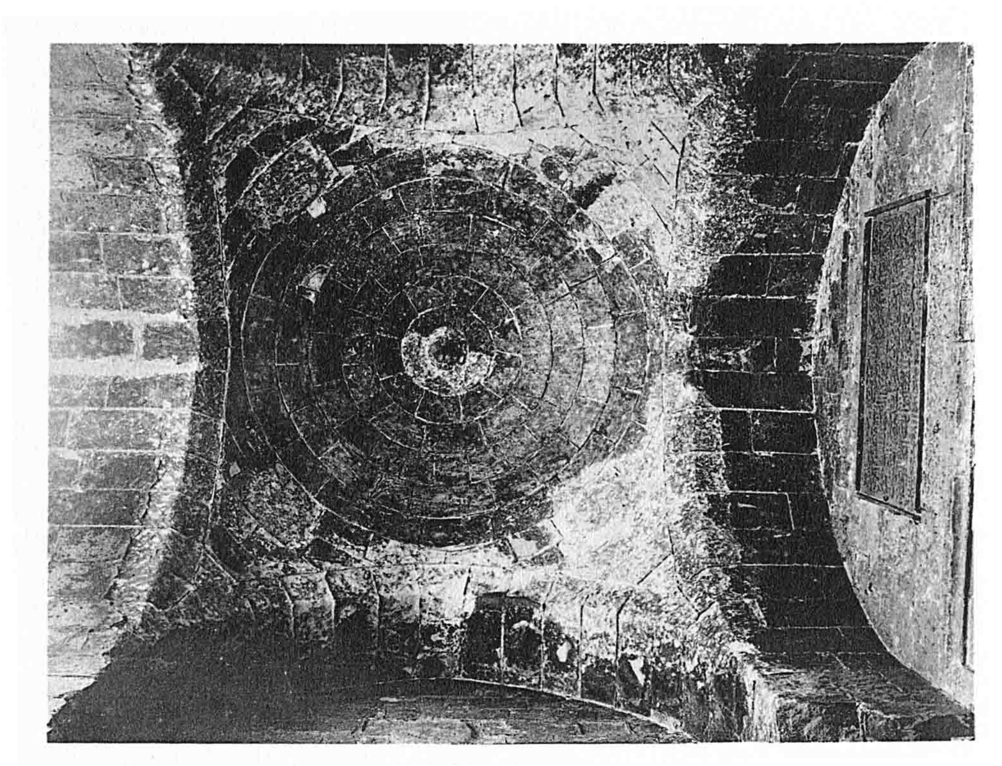
BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of Bibars : vaulting of main entrance.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

IMP. CATALA FRÈRES, PARIS



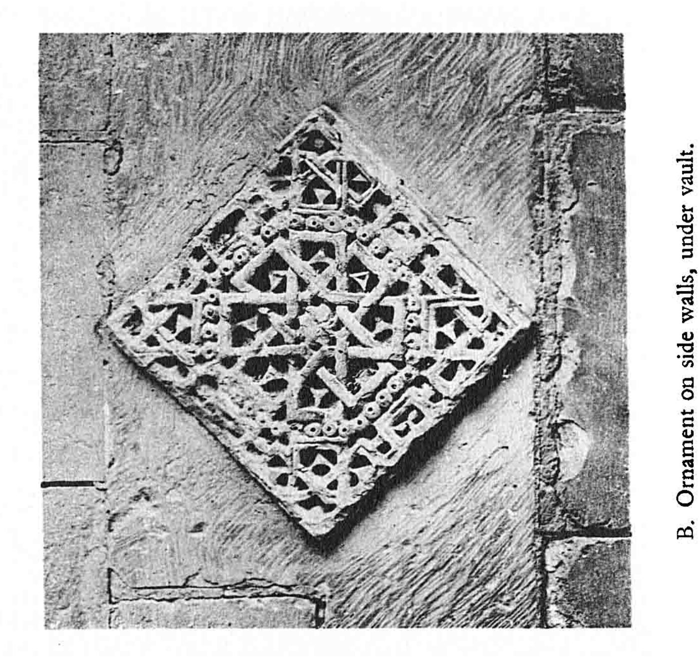
B. Dome over main entrance.

Mosque of Bibars.

A. Ornament to right of main entrance.

IMP. CATALA FRÈRES, PARIS.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



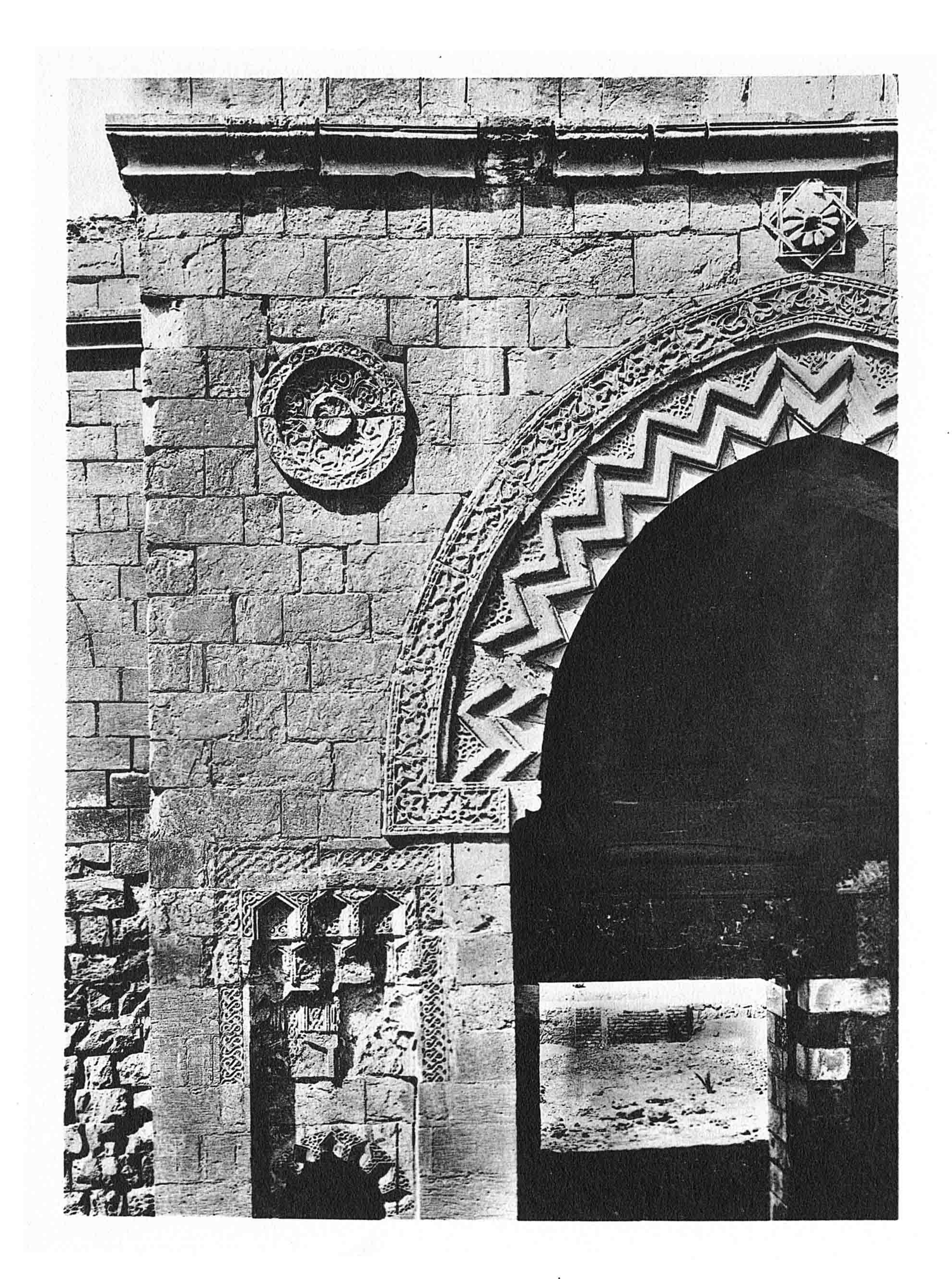
B. Ornament on side walls, under vault.



A. Mosque of Bibars : entrance in north-eastern side.

IMP. CATALA FRÈRES, PARIS.

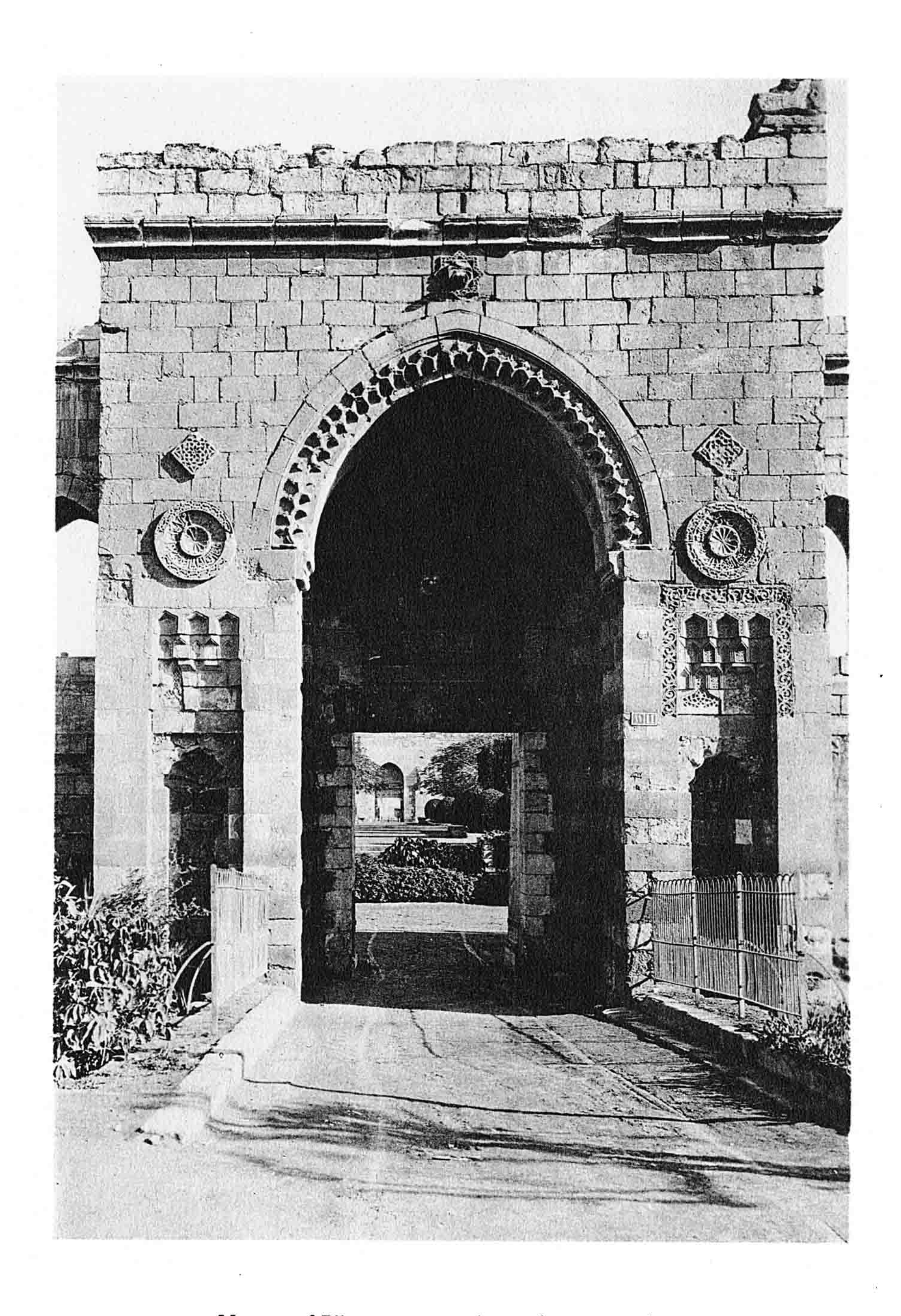
BIFAO 26 (1926), p. 129-193 CREWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of Bibars : detail of decoration on north-eastern gateway.

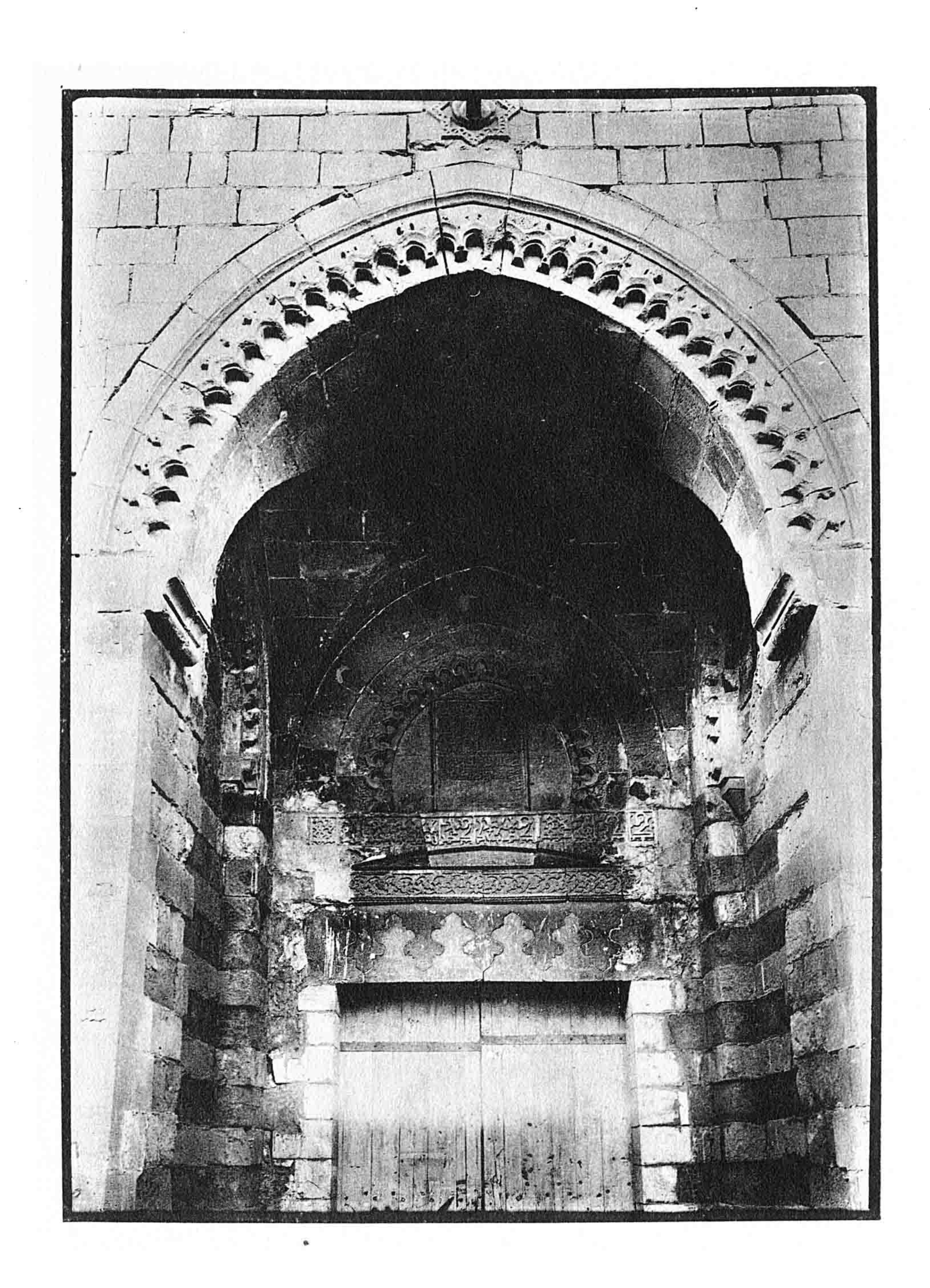
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BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of Bibars: entrance in south-western side.

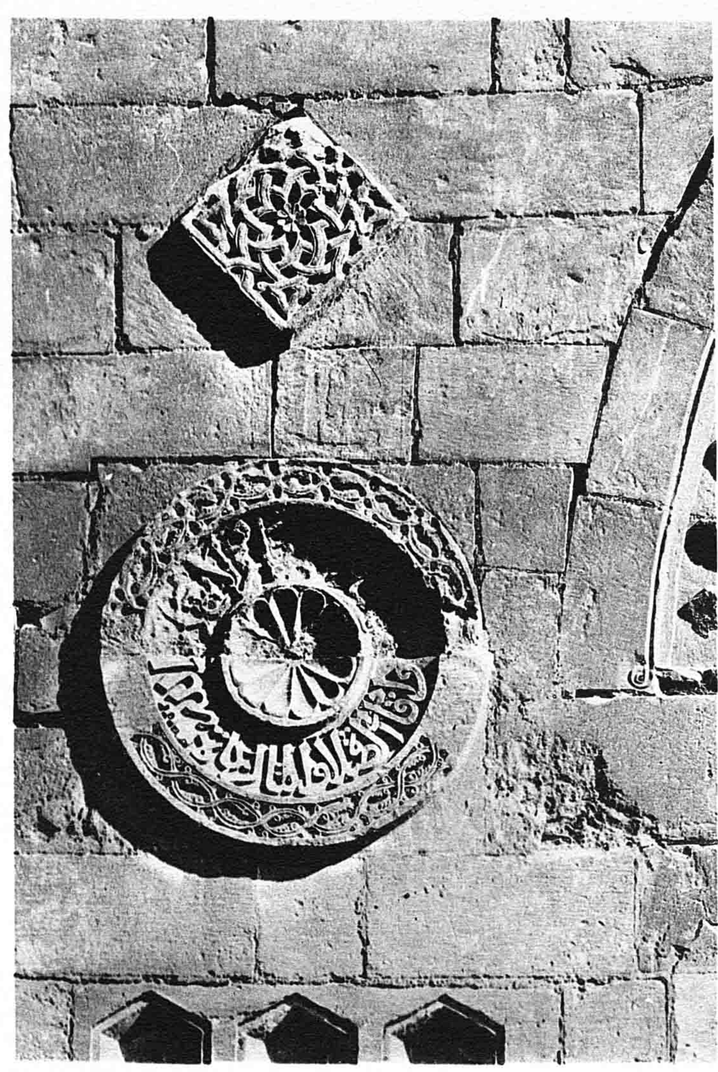
BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of Bibars: interior of south-western entrance.

BIFAO 26 (1926), p. 129-193 CREWSELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

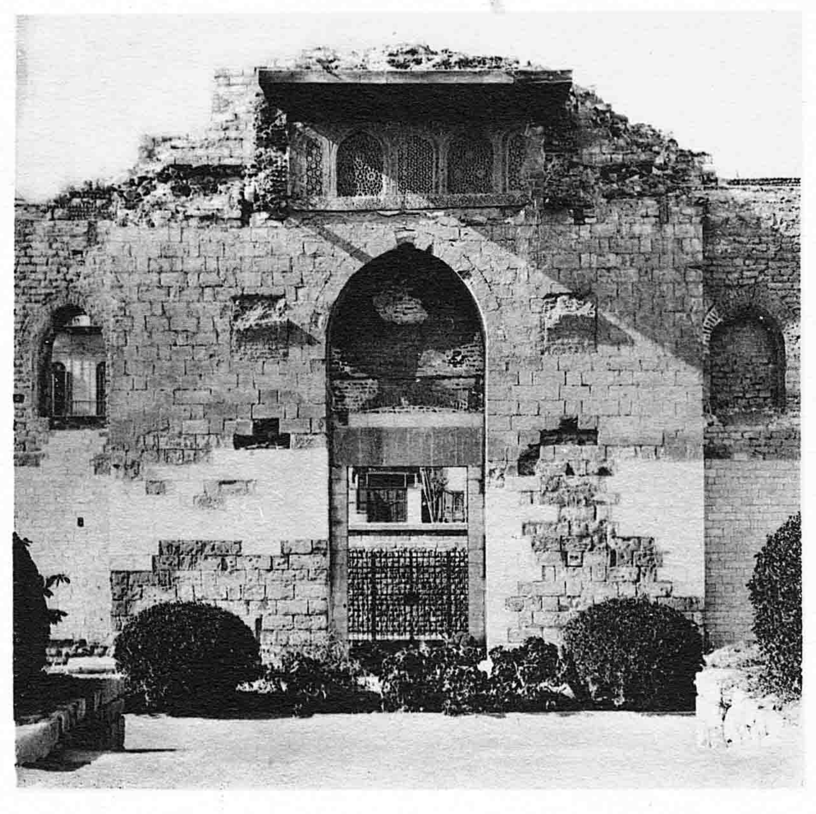
IMP. CATALA FRÈRES PARIS.



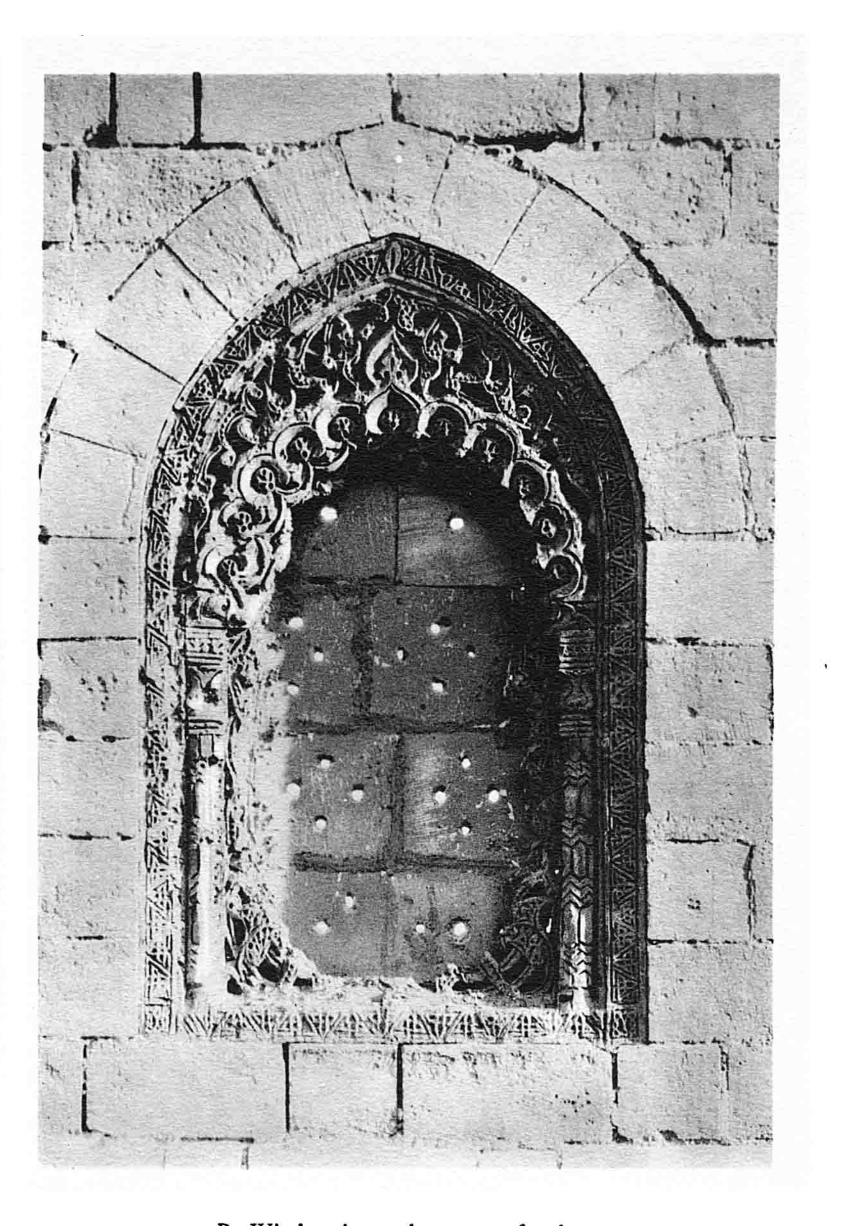


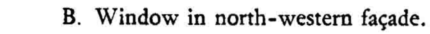
Mosque of Bibars : south-western entrance, decoration to right and left of arch.

IMP. CATALA FRÈRES, PARIS



A. Rear face of main entrance.



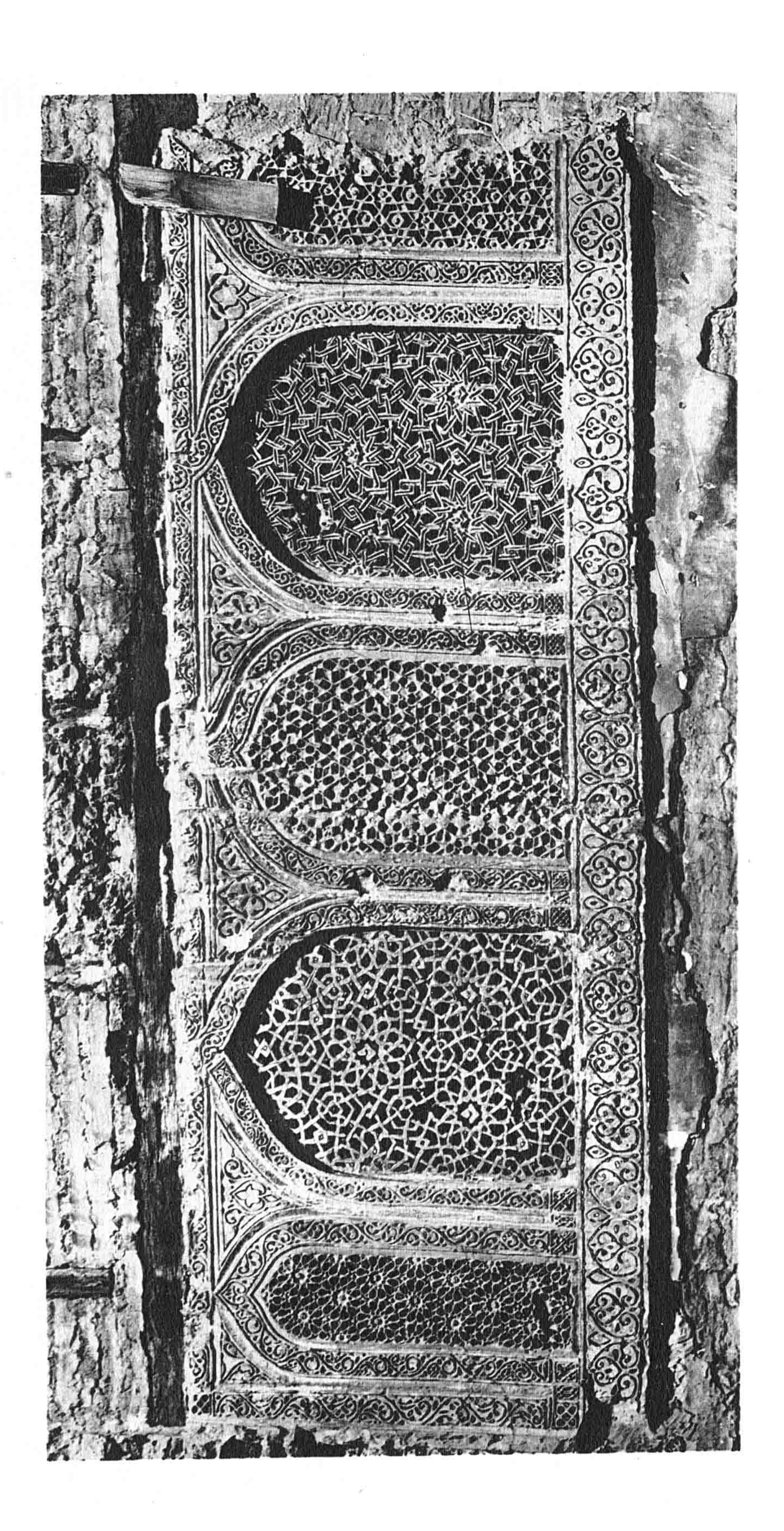


B. Window in north-western façade.

Mosque of Bibars

IMP. CATALA FRÈRES, PARIS

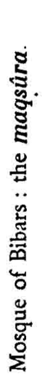
BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of Sultan Bibars : panel of ornament over main entrance, inner side.

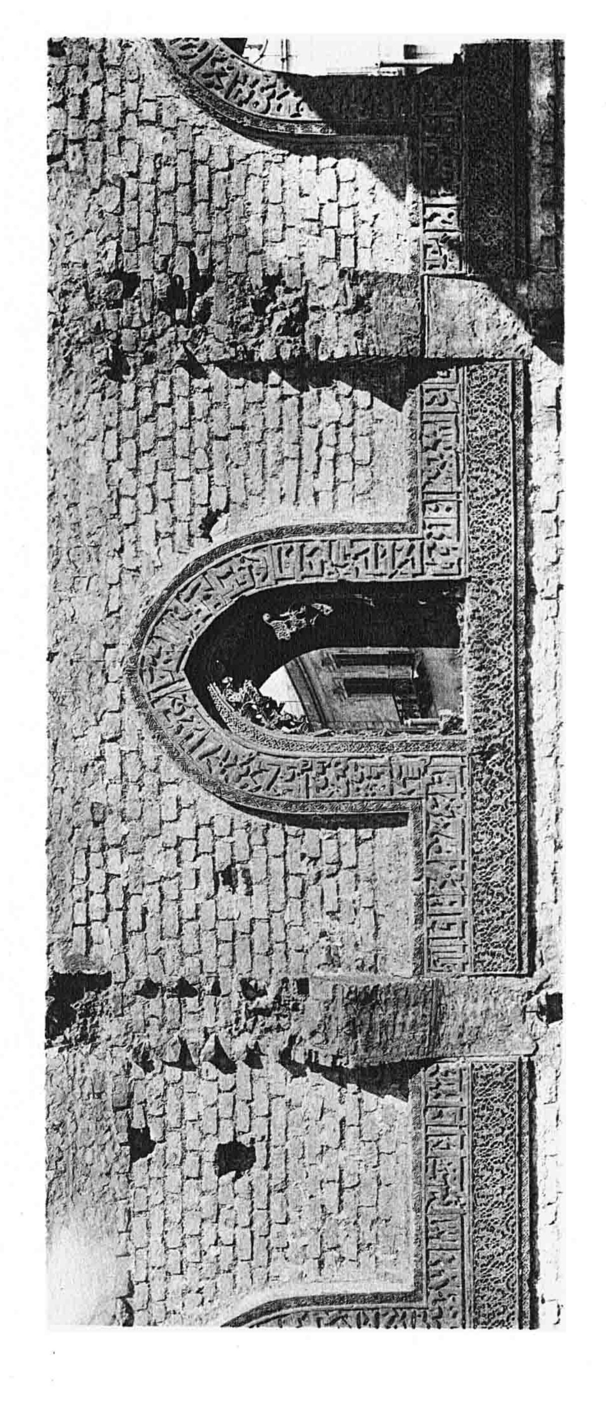
BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

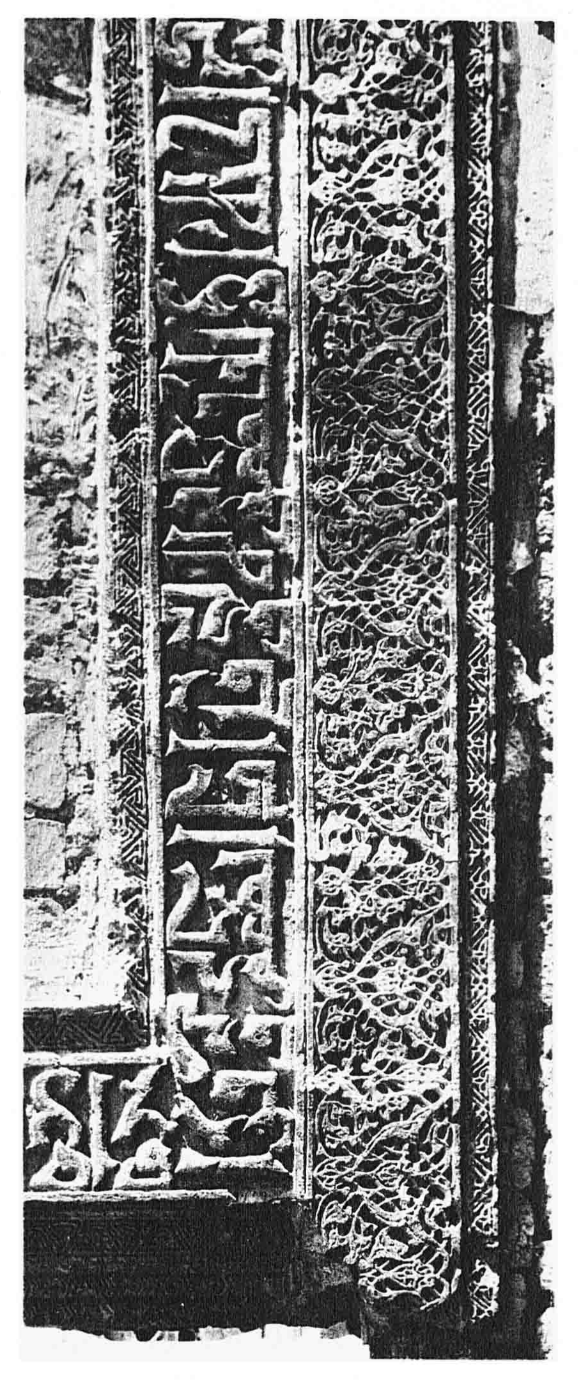
IMP. CATALA FRÈRES, PARIS



Mosque of Bibars : the *maqsûra*.

IMP. CATALA FRÈRES, PARIS



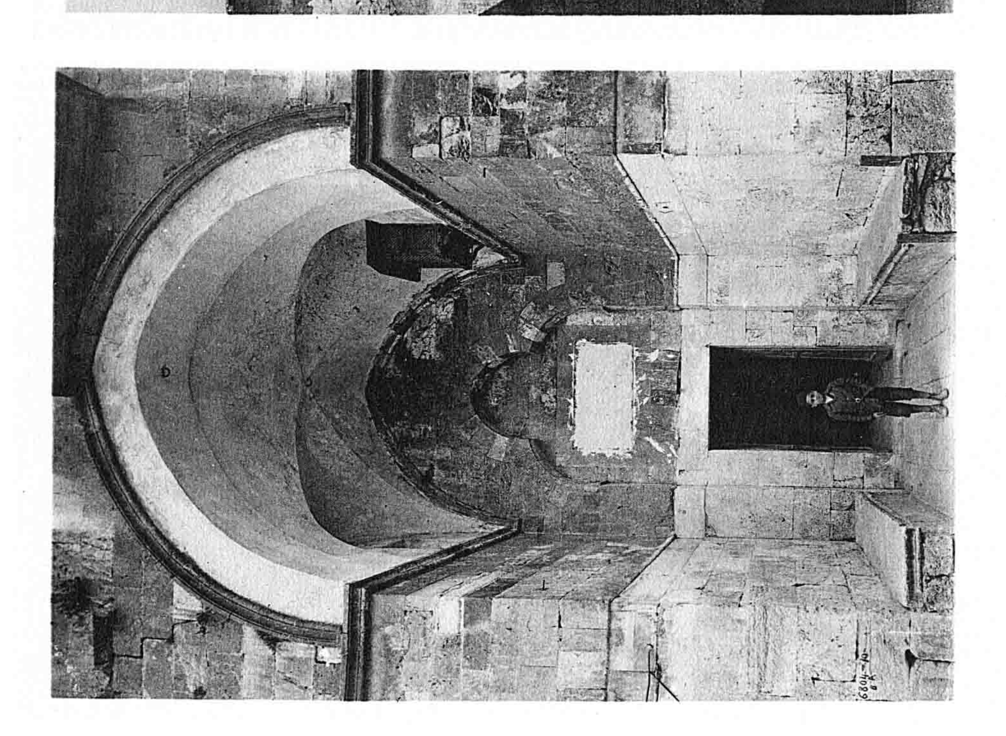


Mosque of Bibars : decoration of interior.

IMP. CATALA FRÈRES, PARIS.

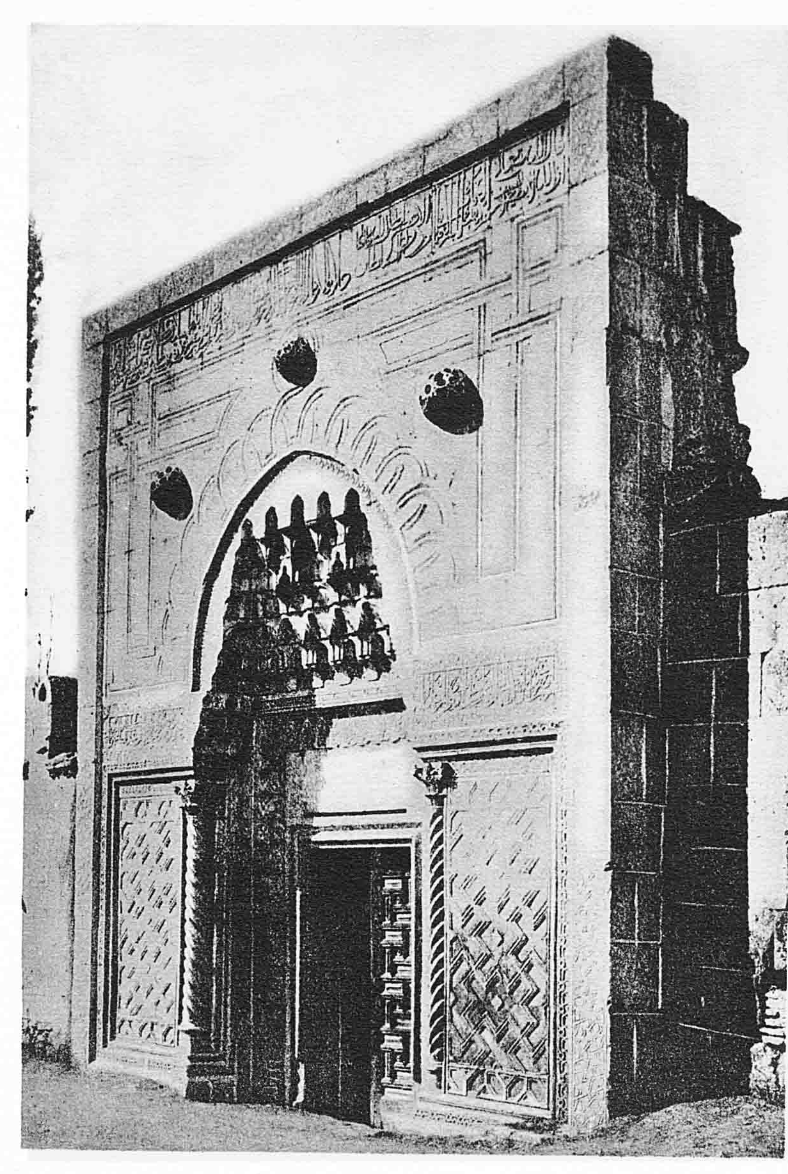


B. ALEPPO : Mashhad of Huseyn : west liwân.

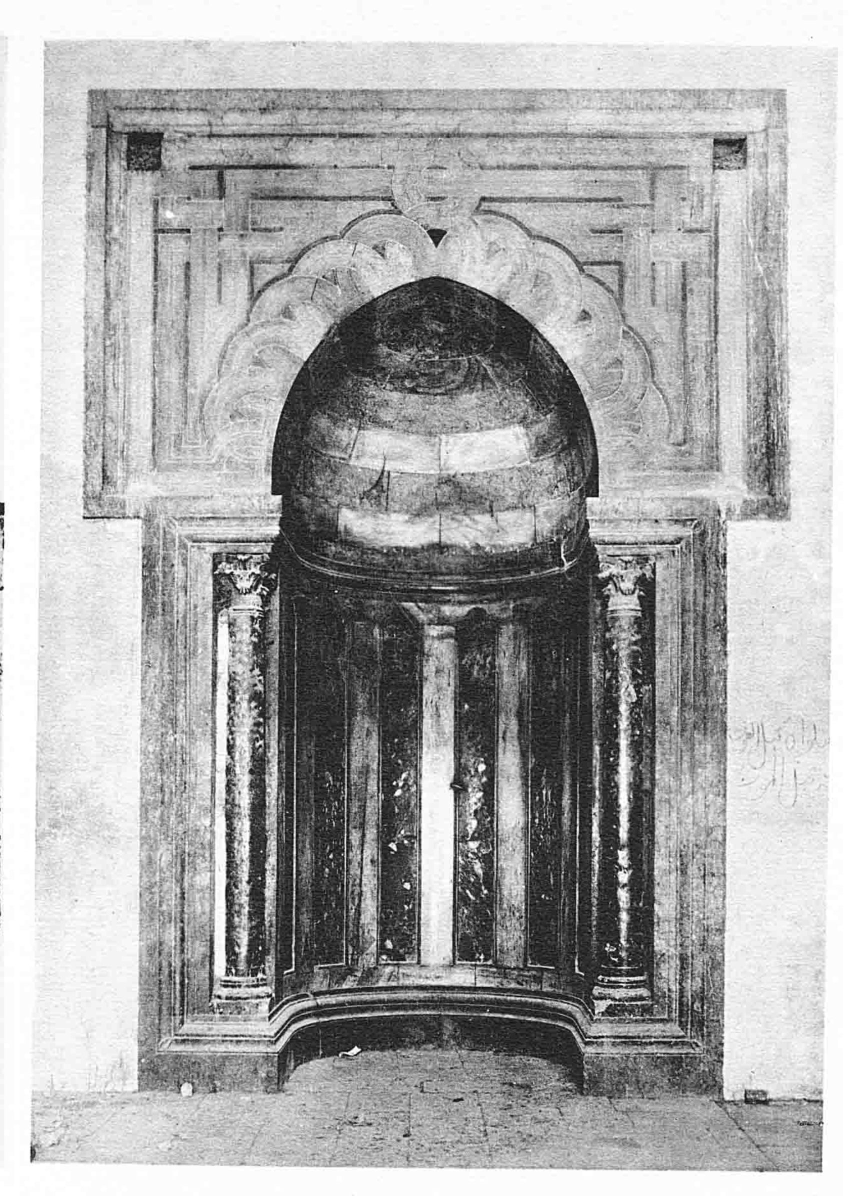


A. JERUSALEM : Khânaqâ of Saladin, entrance.

IMP. CATALA FRÈRES, PARIS.



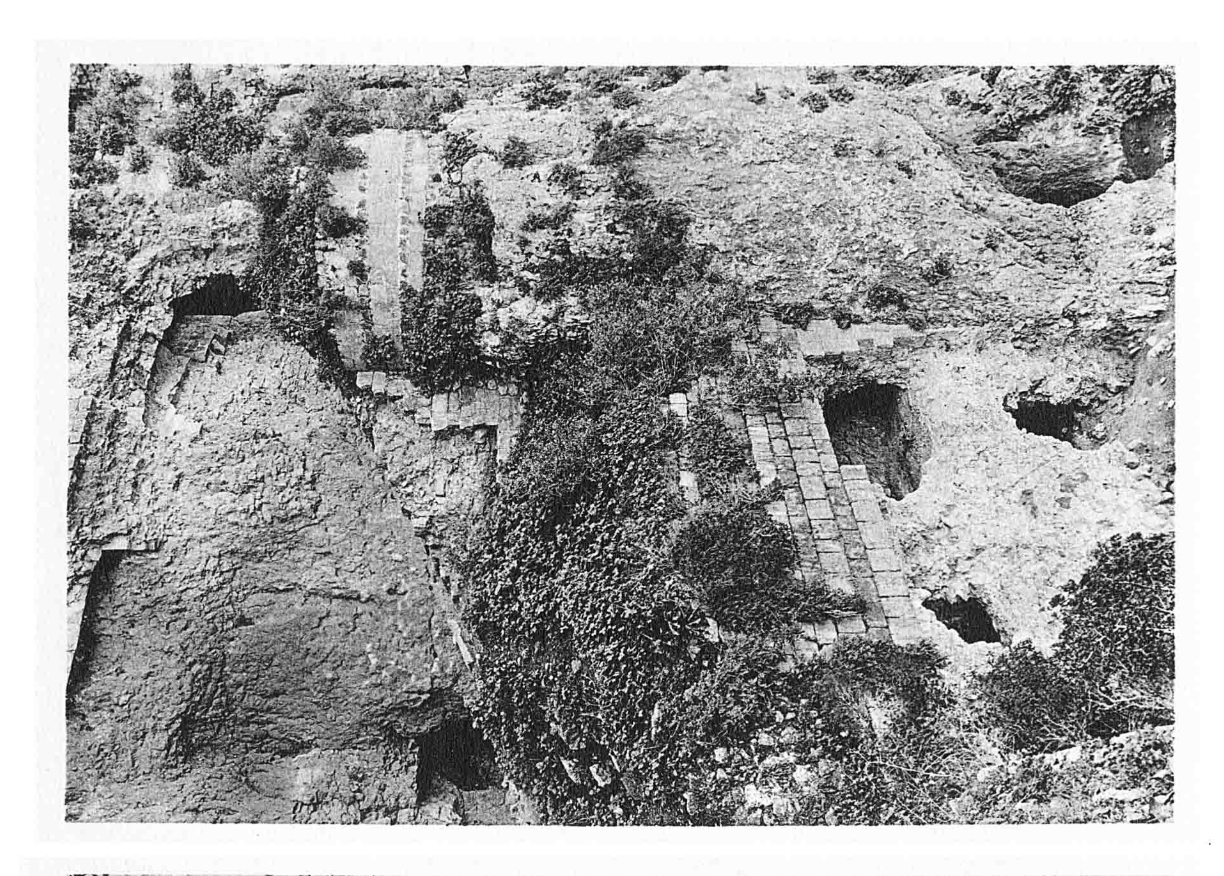
A. KONIA : Qaraṭây Madrasa.



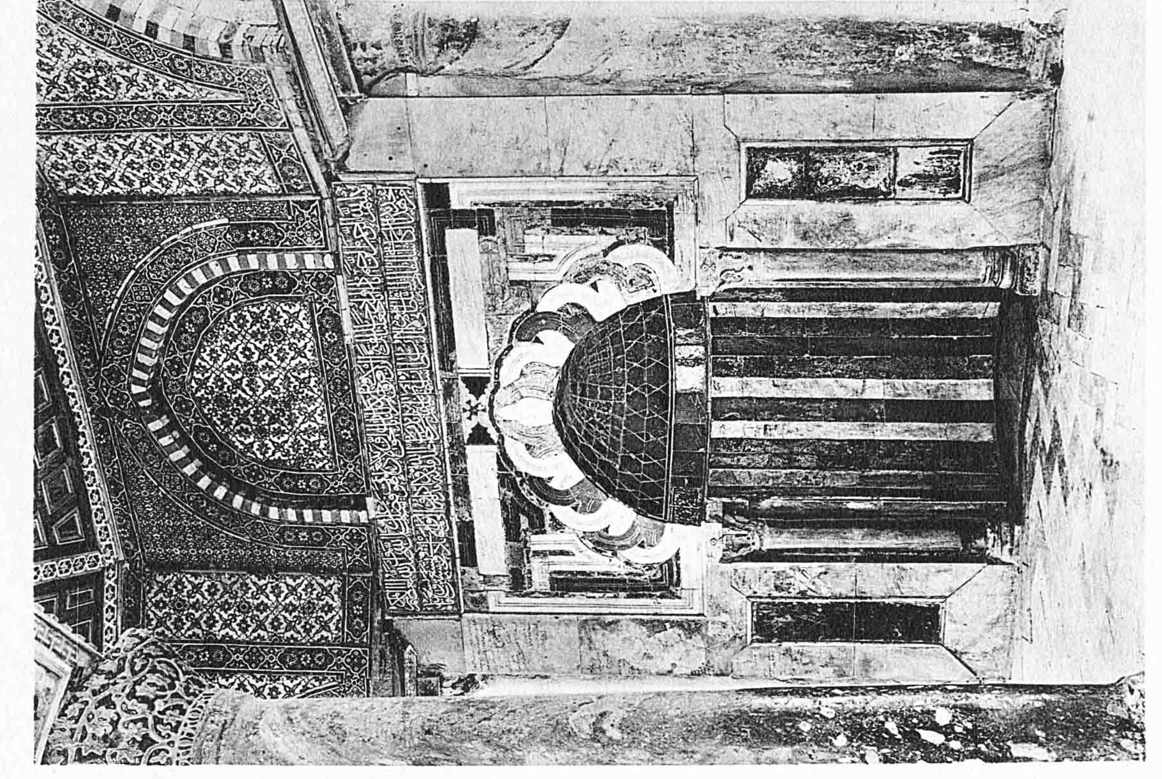
B. ALEPPO : Madrasat as-Sulṭânîya, miḥrâb.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

IMP. CATALA FRÈRES, PARIS.



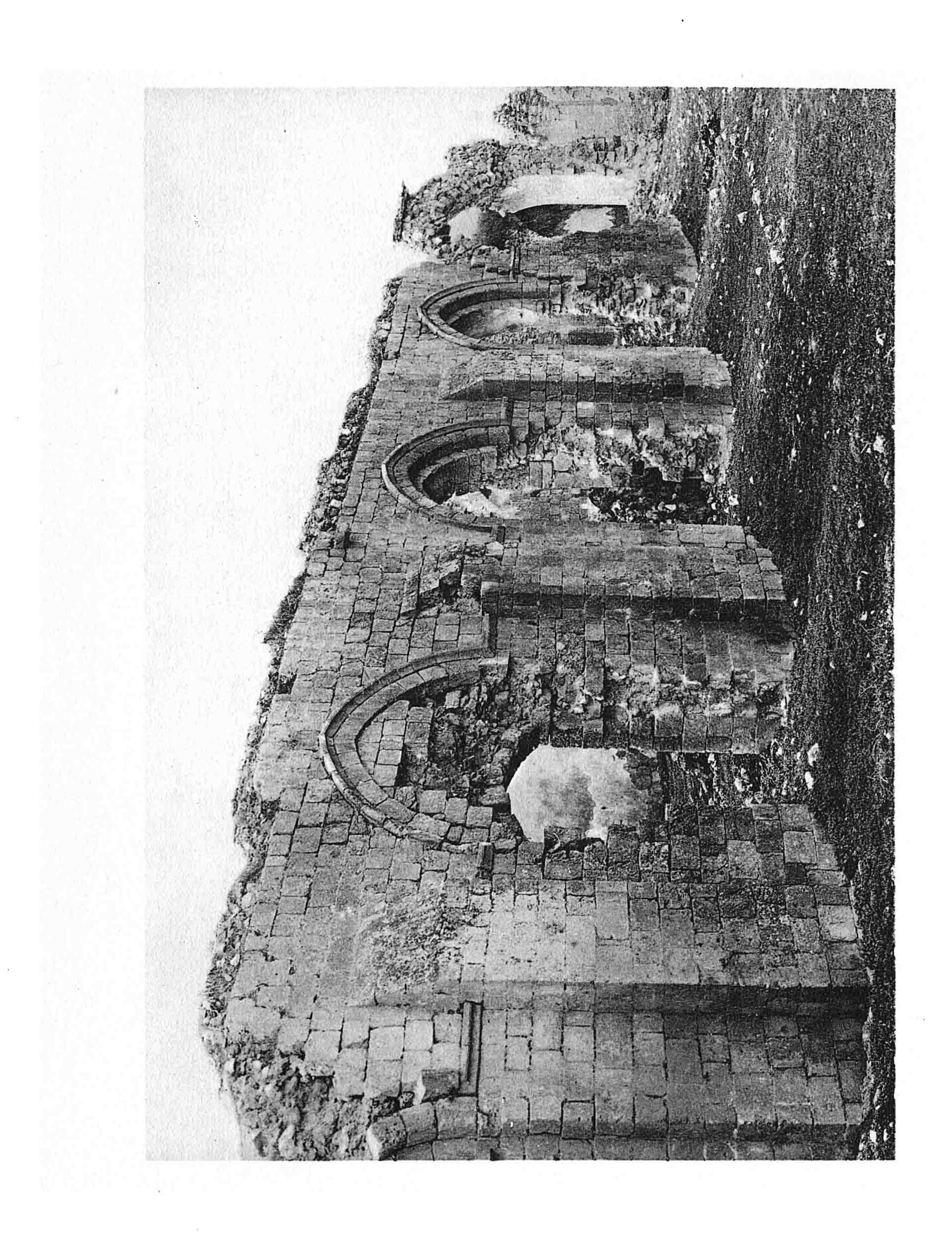
B. QAL'AT IBN MÂN : fortress.



A. JERUSALEM : Qubbat as-Silsileh, mihrâb.

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].

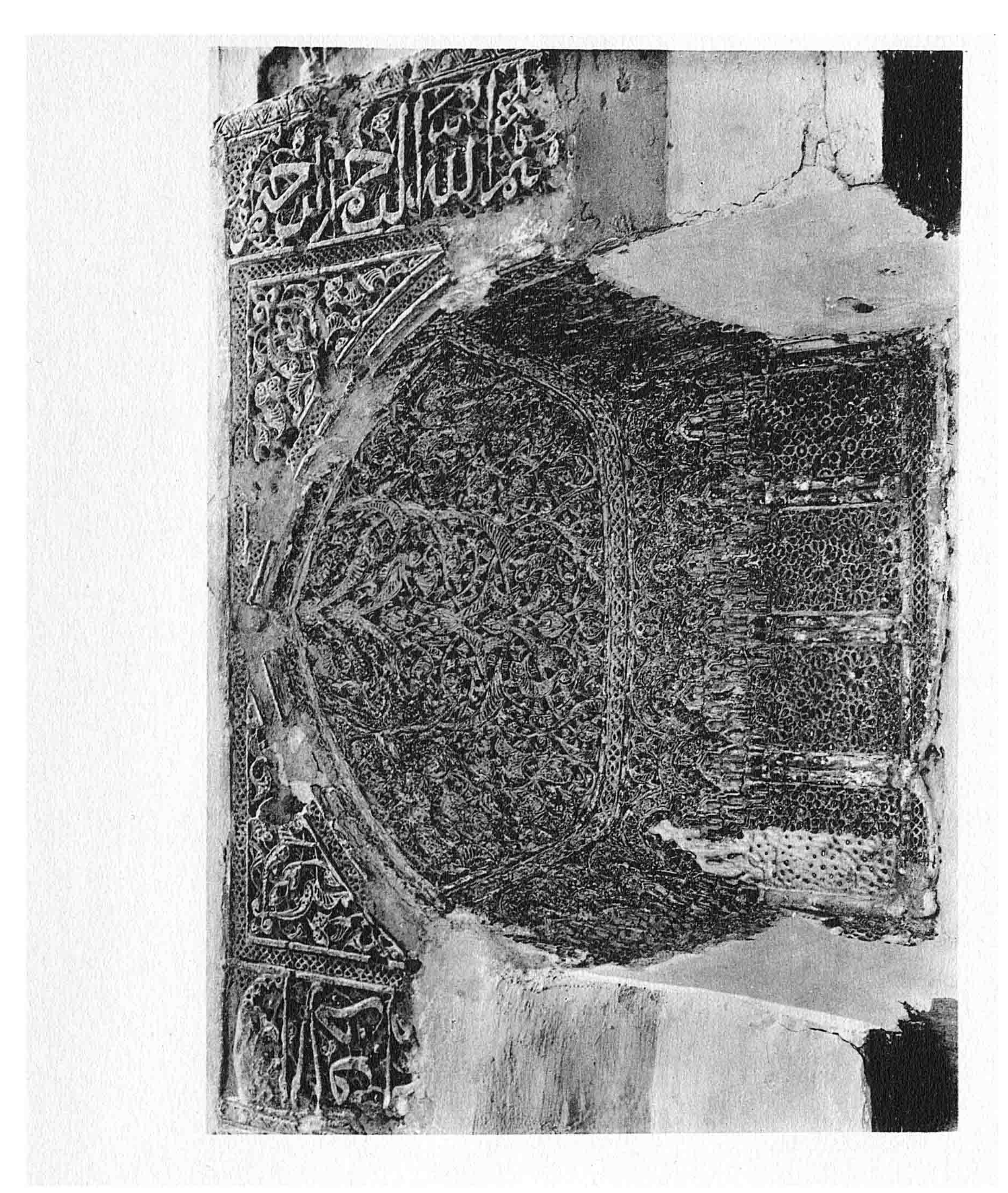
IMP. CATALA FRÈRES, PARIS



RAMLEH : Mosque of Bibars, showing façade of sahn with buttresses.

IMP. CATALA FRÈRES, PARIS

BIFAO 26 (1926), p. 129-193 CRESWELL (Keppel A. C.)
The works of Sultan Bibars al-Bunduqdârî in Egypt [avec 31 planches].



Mosque of ʻAmr : miḥrâb of Bibars.

IMP. CATALA FRÈRES, PARIS.